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	1	IN THE UNITED STATES DISTRICT COURT		
		FOR THE NORTHERN DISTRICT OF OHIO		
	2	EASTERN DIVISION		
	3	LOCAL 17 INTERNATIONAL ASSOC. OF)	
		BRIDGE & IRON WORKERS INS. FUND,)	
	4)	
		Plaintiff,)	
Action No.	5)	Civil
		vs.)	
1:97CV1422				
	6)	
Ohio		PHILIP MORRIS, INC, ET AL,)	Akron,
	7)	
		Defendants.)	VOLUME
11				
	8	- - -		
		TRANSCRIPT OF JURY TRIAL HAD BEFORE		
	9	THE HONORABLE JAMES S. GWIN, JUDGE		
1999		OF SAID COURT, ON MONDAY, MARCH 8,		
	10	AT 8:00 O'CLOCK A.M.		
		- - -		
	11	APPEARANCES:		
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Court 404 U.S. District

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19 Akron, OH 44308

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1 THE COURT: If the jury will please

be seated.

2 And I'll ask Mr. Adelman to continue his cross

3 examination. Mr. Morgan you remain under oath

from last

4 week.

5 MR. ADELMAN: Good morning, ladies

and

6 gentlemen.

7 Q. Good morning Mr. Morgan. How are you?

8 A. Good morning Mr. Adelman. I am here.

9 Q. Let me return to where we left off on
Friday. With
10 respect to some documents here that I want to
put up. Let
11 me have 1421 displayed, please.
12 Again, sir, we don't have a book for
you and so
13 I would ask your best efforts to review this
document on
14 the screen next to you or the large screen?
15 A. I have a small problem I can't see it.
Not a
16 problem.
17 Q. I want you to take a look at that, this is
a May 21,
18 1975 document. Actually, a memo by Mr. Myron
Johnston to
19 Mr. Seligman. Can you identify Mr. Seligman for
the ladies
20 and gentlemen?
21 A. Dr. Seligman, in 1975, I believe, would
have been the
22 Vice President and head of the Richmond Research
and
23 Development Department.
24 Q. Did he later have a different position?
25 A. No, I think he retired from that position.

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1 Q. Now, this memo has to do with the decline
in the rate
2 of growth of Marlboro Red, correct?
3 A. That's what it's titled, yes.
4 Q. And you were the brand manager of all the
brands,
5 including Marlboro at this time, were you not,
in 1975?
6 A. No, I was, I believe at that point I may
have been
7 Assistant Director of Marketing, but the brand
management
8 group would have reported in through that line.
9 Q. Yes, sir, and you were copied on this
memo, true?
10 A. I can't tell that.
11 Q. Well, I would ask the operator to turn to
the last
12 page of the memo, page 6, and you will see there
all the
13 way backs on page 6, if you will allow me to
represent to
14 you that you are copied on this, would you agree
with that?
15 A. I have no problem with that.
16 Q. You have seen this document before,
haven't you?
17 A. Yes.
18 Q. Now, in your understanding, sir, with
respect to
19 Marlboro Red, did Philip Morris rely for sales
for Marlboro
20 in the 15 to 17 age group?
21 A. No, sir.

22 Q. With the first page in mind, if you will
look at the
23 second paragraph, the underscore says, it was my
contention
24 that Marlboro's phenomenal growth rate in the
past has been
25 attributable in large part to our high market
penetration

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1 among younger smokers and the rapid growth in
that
2 population segment. I pointed out that the
number of 15
3 dash 19 years old is now increasing more slowly
and will
4 peak in 1978, and then begin to decline. I also
5 hypothesized that Marlboro would be particularly
vulnerable
6 to the recession.

7 Do you recall, first of all, reading
this memo
8 at the time it was issued in 1975?

9 A. I do not specifically recall it, no.

10 Q. Can we reasonably assume, since it was
copied to you,
11 that you got it?

12 A. You can assume I got it. You can also
assume I read
13 it. I just don't remember reading it.

14 Q. There was concern at this time, was there
not, about
15 the rate of growth decline in the rate of growth
of
16 Marlboro Red?

17 A. No, there wasn't. You see this is another
one of
18 these Mr. Johnston memos, and Myron Johnston was
a
19 demographer. In fact, Marlboro enjoyed it's
greatest rate
20 of growth at this time from 1973 to 1977, I
think it was
21 the four highest years of the brand's growth in
history.

22 And in fact, ironically, for the number of times
23 Mr. Johnston's memos comes up in these kinds of
24 proceedings, Mr. Johnston was wrong in this
case. He was
25 just wrong. He looked at it statistically, but
he was

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1 wrong in his assumptions and prediction.

2 Q. Mr. Johnston worked for Philip Morris for
a number of
3 years?

4 A. I don't know how many, but I would guess,
15, 20.

5 Q. He was there in the 60's, wasn't he?

6 A. I don't know that. I know he was there in
the 70's.

7 Q. He was there in the 80's, too?

time when 8 A. I left in '83, and I think he retired some
9 I was gone.
it says, 10 Q. And at the bottom of this same paragraph
11 underscored, most of these studies have been
restricted to 12 people age 18 or over, but my own data which
includes 13 younger teenagers shows even higher Marlboro
market 14 penetration among 15 dash 17 year olds. The
teenage years 15 are also important because those are the years
during which 16 most smokers begin to smoke. The years in which
initial 17 brand selections are made and the period in the
life cycle 18 in which conformity to peer group forms is the
greatest. 19 Did I read that correctly?
20 A. I believe so.
that 21 Q. You agree with that you -- let me withdraw
22 question. You agree with the proposition
advanced here 23 that the teenage years are also important
because those are 24 the years during which most smokers begin to
smoke? 25 A. If you included 18 and 19 as teenage
years.

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with that 1 Q. He's talking about 15 to 17, do you agree
2 proposition?
3 A. No.
Philip 4 Q. He's referring to his own data; that's
5 Morris's data?
number of 6 A. No, you asked me during the deposition a
7 times. Mr. Johnston generated no internal data,
this is 8 the data from the Federal Trade Commission, the
National 9 Clearing House on Smoking and Health, this is
public 10 University of Michigan.
data. The 11 Mr. Johnston is referring to public
12 reason I know that, I read Mr. Johnston's
deposition where 13 he says that is the case.
14 Q. But nevertheless, regardless of the
source, he 15 brought it to the attention of you and other
officials at 16 Philip Morris?
17 A. Mr. Johnston brought data to the attention
of

18 everybody at Philip Morris, everybody had been
copied.
19 Q. And he did it from the 60's to 70's and
80's?
20 A. I'm not aware he did it in the 60's, I'm
aware he did
21 it in the 70's and I assume he did it in the
80's.
22 Q. If you will, on the second page, page 2 at
the top,
23 there is an underscoring. I would like to ask
you about,
24 again, Mr. Johnston's writing.
25 It seemed reasonable to believe,
therefore,

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1 there should be a relationship between the
number of 15
2 dash 19 year olds in Marlboro sales during the
period of
3 Marlboro's rapid growth. Do you see that?
4 A. Yes, I see it.
5 Q. So that's the postulate he's working on;
there is
6 some relationship between these teen smokers and
the growth
7 of Marlboro?
8 A. That is the postulate he is working on,
yes.
9 Q. And then he, I won't go through the
details here, but
10 he works that out in the memo, correct?
11 A. I don't know, but.
12 Q. Just look below so we can save time. The
numbered
13 paragraphs allow, you see the number of
paragraphs below
14 there. There we go.
15 A. Yeah, you just put up, again, that's where
16 Mr. Johnston was clearly wrong, where he says a
projection
17 of this relationship shows Marlboro sales
peaking at 94
18 billion in 1979 before declining.
19 That is just categorically not
accurate as to
20 what happened to the rate.
21 Q. So he wrote this in '75?
22 A. Yes. And he was wrong four years later
based on his
23 statistics.
24 Q. He was making predictions?
25 A. Yes.

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1 Q. That at least the company looked at?
2 A. Yes.
3 Q. And you said earlier, candidly in your
direct
4 testimony, you have made mistakes over time?
5 A. Yes, I have.
6 Q. And you became CEO and President?

7 A. Yes, I did.
8 Q. Finally, on page three there is an
underscored
in the
10 second paragraph, I'll read the whole sentence.
11 While these correlations are
certainly more
12 favorable for Marlboro's future than the
correlations of
13 time series data, here is where I'm focusing,
they also
14 show that heavily reliance for sales on age
group that is
15 declining in numbers is dangerous.
16 The age group declining in numbers
is the age
17 15 to 17 year old smokers, correct?
18 A. Well, it doesn't say that there, but I'm
not going to
19 quarrel with that.
20 Q. You won't quarrel with that?
21 A. No.
22 Q. Doesn't that suggest, therefore, at least
23 Mr. Johnston's point is Philip Morris is relying
on this 15
24 to 17 year old age group with respect to the
Marlboro
25 brand?

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he's saying
it's
and it
would sell.
He says they
word,
correct?
to 17?
that there.
group is
age group,
21 correct?

1 A. I'm not sure what you mean by relying,
2 what he's saying. If you rely on the age groups
3 dangerous. As I said, Marlboro didn't peak out,
4 sells well over twice of what he projected it
5 Q. I want to go back so we could be clear.
6 also show heavy reliance for sales, that's his
7 reliance, correct?
8 A. From a previous -- I don't see that here.
9 Oh, they --
10 Q. Do you see it, sir?
11 A. Yes.
12 Q. He's saying heavy reliance for sales,
13 A. Yes.
14 Q. On an age group, and that age group is 15
15 A. That's what I'm saying. It doesn't say
16 Q. From the whole memo?
17 A. Yes, I'm sorry, we are, yes.
18 Q. Take your time, okay.
19 And then he points out that the age
20 declining, that's again the 15 to 17 year old
21 correct?

22 A. Well, again, he doesn't say that here.
23 Q. No, but the whole memo you have read and
studied says
24 that?
25 A. Yes, it does.

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1 Q. And he says that's dangerous?
2 A. He says that's dangerous from a
statistical
3 standpoint.
4 Q. All right.
5 A. I believe that you didn't show up in that
same memo
6 that he does -- I'm sorry, go ahead.
7 Q. I don't think there is a question pending,
sir.
8 A. There is not.
9 Q. Let me ask to have 775 put up.
10 Again, if you would be kind enough
we'll move
11 through this here. This is a 1969 memo,
8/23/69 memo from
12 Mr. Johnston to Mr. Seligman?
13 A. Right.
14 Q. Here we have Mr. Johnston writing in 1969
a memo on
15 Marlboro's penetration by age and sex?
16 A. Yes.
17 Q. If you would turn to the second page.
There is a
18 chart. It probably will be a stretch to look at
it, but I
19 hope you can.
20 THE WITNESS: May I?
21 THE COURT: Yes.
22 BY MR. ADELMAN:
23 Q. Keep your voice up. Good. There is the
chart.
24 He's talking about, in this
particular study,
25 and you will notice in the lower left hand
highlighted has

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1 the age group of study going back to 15 years
of age,
2 correct?
3 A. Yes, sir.
4 Q. All right. So what we have here in this
exhibit is
5 Mr. Johnston's 1969 memo referencing Marlboro
market
6 penetration by age and sex, again going back to
15 year old
7 smokers. Is that right?
8 A. That's what that chart shows, yes.
9 Q. By the way, with respect to the last
exhibit we put
10 up, did you, after reading that, the 1975
exhibit, write a
11 memo to Mr. Johnston saying don't tell us
anymore about

12 teenage smokers?
13 A. No, I did not.
14 Q. And, to your knowledge, nobody else at
Philip Morris
15 did that either, correct?
16 A. No.
17 Q. Now, in the mid-70's, focusing on 1974,
you at Philip
18 Morris became concerned a bit, did you not about
the
19 competition for the Marlboro franchise, as it's
put,
20 correct?
21 A. I think we were concerned every year about
22 competition from Marlboro franchise.
23 Q. I'm focusing on 1974. There came a time
where there
24 was a particular concern about how Marlboro was
doing in
25 that year, correct?

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in 1974,
1 A. No, I don't think that's correct. I think
2 Marlboro was doing quite well. I think that the
issue in
3 1974 in the early and mid-70's, was trying to
pin down the
4 degree to which the growth in menthol, the
menthol category
5 was important in the industry.
6 Q. To the point, sir, didn't you, Philip
Morris,
7 commission the Roper organization, the survey
people, to do
8 a study relative to Marlboro?
9 A. I don't know if it was relative to
Marlboro or
10 relative to the menthol category.
11 Q. Didn't you commission them to repeat, sir,
to do a
12 study relative to Marlboro particularly with
respect to
13 young smokers?
14 A. I don't know about the characterization.
I know what
15 you are talking about. In 1974, there was a
Roper study
16 done for the one time in 30 years, that let
Roper go down
17 below 18 year olds.
18 Q. May we have 1431 put up, please?
19 All right. This is a cover memo of
Exhibit
20 1341. First of all, you'll notice the headline
is called
21 Highlights of Roper Special Study on young
smokers,
22 correct?
23 A. That is correct.
24 Q. You have seen this before?
25 A. Yes.

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1 Q. In fact, you are copied on it?
2 A. Yes.
3 Q. And the memo is authored by a Mr. Al
U-D-O-W, he was
4 in marketing then, wasn't he?
5 A. No, he was not.
6 Q. What position did he have?
7 A. Marketing research.
8 Q. Marketing research. And marketing
research worked
9 along with the marketing team, did they not?
10 A. Yes, they did.
11 Q. Providing them information?
12 A. Yes.
13 Q. Now, if you will, the Roper study has
indicated here,
14 in the text underscored, beginning, there is
evidence from
15 many sources to suggest some new trends in the
marketplace
16 particularly among young smokers, correct?
17 A. That is correct.
18 Q. And it says, because of the implications,
especially
19 from Marlboro, of any change among young
smokers, we
20 commissioned the Roper organization to undertake
a special
21 personal interview among a nation-wide sampling
of smokers
22 up to the age of 24, with interviewing being
done between
23 June 7 to 15, 1974.
24 A. You didn't read it exactly.
25 Q. Correct me?

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1 A. You just left out a couple of words.
2 Q. Because of the implication, it says,
especially from
3 Marlboro, any change among young smokers, we
commissioned
4 the Roper organization to undertake a special
personal
5 interview study among a nation-wide sampling of
smokers up
6 to the age of 24, with interviewing being done
between June
7 7 to 15, 1974?
8 A. That's correct.
9 Q. You understand, and you agree, there was a
concern
10 about Marlboro with respect to young smokers,
correct?
11 A. As I said, my memory is there was a
concern about the
12 menthol category.
13 Q. This corrects your memory?
14 A. No.
15 Q. You don't think this was a subject of the
Roper
16 study, Marlboro's position with respect to young

smokers?

17 A. I know what the study was, and the study
was a
18 specific look at the menthol category as it
related to
19 Marlboro and as it related to young smokers.
20 Q. All right. It says also, we commissioned
the Roper
21 organization, correct?
22 A. Yes.
23 Q. That means Philip Morris commissioned
them?
24 A. Philip Morris commissioned them.
25 Q. In particular do you not understand who
commissioned

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1 the Roper organization?
2 A. I do not know specifically, but it would
fall under
3 the responsibility of the Marketing Research
Department.
4 Q. Okay, Mr. Udow was a member of that
department?
5 A. He would not have commissioned it; it
probably would
6 have been Mr. Fontaine, who we discussed
previously.
7 Q. From time to time in the past Philip
Morris used the
8 Roper organization for various studies and
surveys,
9 correct?
10 A. Many, many years.
11 Q. And Philip Morris directed Roper in terms
of what
12 type of research they wanted, correct?
13 A. If it were a Philip Morris commissioned
study Roper
14 also still does, did and still does, a lot of
national
15 studies that Philip Morris would not commission
per se.
16 Q. All right. This is a commissioned study;
that means
17 it came from Philip Morris, correct?
18 A. It means that, yes, it means that Philip
Morris paid
19 for it and authorized it.
20 Q. And also directed what terms and what
study, what
21 terms of the study should be; correct?
22 A. Yes, I think that's fair.
23 Q. If you turn to the next page, the heading
of this
24 report, this is a report of the Roper study, The
New
25 Competition for Marlboro's Franchise, all right?

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1 A. Yes.
2 Q. Can you read -- did you read this at the
time it was

3 issued?
4 A. I'm sure I did.
5 Q. And on the next page, underscored, is as follows.
6 This is the introduction. From this memo, Mr. Udow
7 summarizing the Roper report, what was done.
8 The Roper organization was commissioned to
9 undertake the study summarized here with the intention of
10 probing the dynamics of the market among smokers below the
11 age of 24. In parens. This was not the usual quotes,
12 sample of age 18-24 in this study. No lower age limit was
13 set. Correct?
14 A. That's correct. I mentioned this Friday. There were
15 30 years, there were two instances where I thought Philip
16 Morris exercised bad judgment. This was one of them.
17 Q. We'll go on to see here in a moment that the study
18 examined the Roper study, reported back to Philip Morris,
19 examined smoking habits of people below 18, correct?
20 A. In this particular study it did, yes.
21 Q. You were embarrassed by this document, weren't you?
22 A. I've said I've been embarrassed, and you asked me
23 that during the deposition, and I am embarrassed. And the
24 reason I am embarrassed, I would have wished, both at the
25 time and now, the company I spent my life in was; perfect

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1 and it's not. And as I said, this was, looking back on it,
2 an error in judgment as to let the interviewers talk to
3 people below 18.
4 Q. And that they did, didn't they?
5 A. Yes, they did.
6 Q. And the report shows that, correct?
7 A. The report shows that.
8 Q. If you will, on page 2, sir, there is an underscore
9 describing what Roper was commissioned to do. And it says,
10 young smokers were sought out in 35 locations around the
11 country at popular hangouts, at drive-ins, bowling alleys,
12 at military bases, at beaches, et cetera, is that correct?
13 A. That's correct.

people 14 Q. And this is part of the plan to interview
15 under 18, correct?
16 A. I guess.
to give 17 Q. All right. Now, moving on to page 5, just
here. You 18 you an example, there are a number of charts
not? 19 have reviewed this document before, have you
20 A. Yes. And I reviewed it, in fact.
one part of 21 Q. At and at the bottom highlighted, is the
22 the chart, in this case, talking about white
smokers only? 23 And there is a category for interviewees of
people age to 24 18, correct?
the 25 A. Yes, it shows Marlboro's and Kool which is

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1 menthol issue. I'm sorry.
2 Q. Well, are you going to comment you have a
furtherance 3 to this point that shows people under 18 being
surveyed? 4 A. No. I'm sorry.
5 Q. Okay. And without going through the rest
of the 6 document, each chart in here talks about
interviews of 7 people under 18, as well as other smokers,
correct? 8 A. I don't know if each chart does, but yes,
the study 9 does cover people under 18.
10 Q. You have said by representation that it
does and 11 otherwise?
12 A. That every chart does?
13 Q. Yes.
14 A. In that report?
15 Q. Yes.
16 A. I don't think it's worth quibbling about.

Sure, I'll

17 accept your representation.
18 Q. Finally, and now, this report was done by
Mr. Roper 19 to whom Philip Morris used and accepted his
work? 20 A. That's correct.
21 Q. That's Bud Roper, correct?
22 A. I think his correct name is Burns Roper,
but he's 23 referred to as Bud, yes.
24 Q. There was a meeting held on August 8, 1974
in New 25 York at Philip Morris in which Mr. Roper made a

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1 presentation about that report.
2 Did you go to that meeting?

3 A. I don't recall. I think, given my
position, if I
4 were in town I would have been there, but I
don't recall
5 it.
6 Q. Do you recall Mr. Roper's speaking about
smokers
7 under 18?
8 A. No, I do not.
9 Q. Do you think he did, if that was the
subject of his
10 study?
11 A. I have no way of knowing, sir. I don't
recall the
12 meeting.
13 Q. Let's see if you recall this: At the
meeting, if you
14 were there to the extent that you recall, did
you make any
15 personal objection about the survey going to
people under
16 18, say stop it, let's not do that any more?
17 A. No. If I had been there, I don't think I
would have
18 done that, because the issue was not quite the
issue that
19 it seems today. Although, again, I don't, I do
not thing
20 Philip Morris should have done that study.
21 Q. All right. Next is Exhibit 1333.
22 This is -- it's over your shoulder
-- this is
23 the actual Roper study. I just want to go over
a point
24 here. He styles it, A Study of Smoking Habits
Among Young
25 Smokers, correct?

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1 A. Correct.
2 Q. And on page 2, underscored, we have,
again, Mr. Roper
3 outlining his mandate, indicating the there was
no lower
4 age limit, and that they interviewed at teenage
hangouts,
5 if I can summarize that?
6 A. The teenage hangouts is not quite fair, it
had a
7 lower age limit, and it points out both in this
memo and
8 the memo you showed me before, that that was a
deviation
9 from the standard practice.
10 Q. As far as you are concerned, right, that
is?
11 A. No, I believe that's what the memo said.
The one you
12 showed me before said it right on it where you
had it
13 highlighted, this was not our usual practice.
14 Q. Okay. On page 8, if you will, among his
conclusions,

15 under detailed discussion, the category, brand
smoked most
16 often, Marlboro, NM, has the largest share of
young
17 smokers, with 32 percent saying they smoke it
most often,
18 correct?
19 A. Yes. And I feel obligated to point out
there is an
20 inference here, I think, that young, there is
something
21 wrong with young smokers 18 and over is fine.
And if you
22 look at the numbers in the study, you will find
the below
23 18 that were actually talked to were a tiny
percentage of
24 the entire sampling. So I don't think young
here means
25 under 18 is the point I'm trying to make.

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10. If you
both
whites have
younger.
this age
smokers, as

1 Q. Let's talk about that by looking at page
2 will, with me, sir, page 10, says, by Mr. Roper,
3 Marlboro among whites and Kool among blacks and
4 their largest share of very young smokers 18 and
5 Suggesting the propensity toward conformity in
6 group gives both brands a boost in that group?
7 A. That's right. Here he says very young
8 opposed to very --

Marlboro has the
people in both

9 Q. What he's saying, under 18 smokers,
10 largest share, correct?
11 A. Yes.
12 Q. Yes. And below that is a chart which I've
13 highlighted for the 18 and less category of

very last
Roper
you to
you see
happen to be?

14 instances, correct?
15 A. You highlighted 18 and less.
16 Q. Yes, that's correct.
17 A. Yes, you did.
18 Q. And finally, at the end of the document,
19 page. There is a copy of the survey that the
20 organization was commissioned to use, and I want
21 focus on question 30, for the interviewees. Do
22 that?
23 A. Yes, I do.
24 Q. And it says, question, how old do you
25 And the age starts at 14, doesn't it?

3051

1 A. Yes.

2 Q. You read this report at the time it was
issued,
3 correct?
4 A. I'm sure I did.
5 Q. And you became aware from this and other
documents
6 that Marlboro had the largest share of smokers
in the under
7 18 group, didn't you?
8 A. I was aware of that.
9 Q. May we have 2279, please.
10 Before we get into that document,
Mr. Morgan, I
11 wonder if you can identify for the people a
couple people
12 in terms of their position in the organization,
Mr. Zolar?
13 A. Mr. Zolar followed a Mr. Fontaine as head
of the
14 Marketing Research Department.
15 Q. In New York?
16 A. In New York.
17 Q. And the other gentleman I would like you
to identify
18 is Mr. Goodale?
19 A. Tom Goodale, what kind of year are we
talking about
20 here?
21 Q. This document is dated 1981.
22 A. Tom Goodale worked for Philip Morris. He
had a
23 variety of positions, and I can't pinpoint what
he
24 specifically would have been doing in 1981.
25 Q. Did he work in marketing at any time?

3052

1 A. No, he did not.
2 Q. Did he work under your direction?
3 A. No, he did not, that I remember.
4 Q. Let's turn to this document, entitled,
title of the
5 document authored March 31, 1981 is Young
Smokers
6 Prevalence, Trends, Implications and Related
Demographic
7 Trends. There we go.
8 Now, did you read this document at
the time it
9 was issued or shortly thereafter?
10 A. I don't know.
11 Q. It would be reasonable to assume that you
did,
12 correct?
13 A. Was I copied on it?
14 Q. No, sir.
15 A. I don't know it's a Richmond document.
There were a
16 lot of Richmond documents that stayed internal
to Richmond.
17 If I were not copied on it, I may not have read
it.
18 Q. But we see here it was sent to Mr. Zolar

in New York

19 and Mr. Goodale in New York?
20 A. Okay, two comments. Mr. Goodale, that
helps me spot
21 the time. Mr. Goodale was in 1981. And the
reason he was
22 copied on it, Mr. Goodale was sort of a liaison
from
23 Richmond manufacturing who was headquartered in
New York,
24 so that's why he would have gotten it. Mr.
Zolar got a lot
25 of documents and correspondence on research I
would have

3053

1 never seen, so I can't say I saw this.
2 Q. You have seen it since, haven't you?
3 A. I'm sure I must have seen it in
preparation for --
4 Q. Litigation?
5 A. Litigation. But I, actually looking at it
today,
6 don't, I mean it doesn't jump out at me that
it's a
7 document that I recall.
8 Q. Let's look into it.
9 A. Okay.
10 Q. Now, this is sent from Mr. Johnson
actually to
11 Mr. Seligman. What position did he have at the
time?
12 A. Dr. Seligman, I think at that time, would
have been
13 the Vice President of Research and Development
in Richmond,
14 who would be the top person in Mr. Johnston's
department.
15 Q. And here the subject is young smokers
prevalence,
16 trends, implications and related demographic
trends?
17 A. Right, classic Mr. Johnston work.
18 Q. And seven years after the memo we saw a
little
19 earlier, here he's writing another memo on this
topic?
20 A. Or report, yes.
21 Q. Or report.
22 And he outlines what he's about to
do.
23 And then on page 2, I focus your
attention
24 where he's talking about, again, young smokers,
because
25 the major data sources have just become
available, and

3054

1 because of the importance of these data to the
company, he
2 indicates he's prepared this memo, correct?
3 I think we have skipped a page

there, I'm

4 sorry.

5 A. I can't find that.

6 Q. It's really page one of the memo. You see
what I've

7 just read about, no matter, we are out of sink
here and it

8 is my fault, but accept my representation that
he did say

9 these data are important to the company, okay?

10 Do you know why it was that
information about

11 teenage smoking was important to the company in
1981?

12 A. I think it's important to Mr. Johnston,
first of all,

13 because he's a demographer. And I don't know
whether we

14 discussed it on Friday or not, but I'll say
today, again,

15 I'm sorry if I repeated myself.

16 Mr. Johnston was in Richmond, he
worked in R

17 and D as a statistician and a demographer.

Philip Morris
18 was a growing company at this time and had
major issues

19 about factories, about how many to build, about
what

20 capacity to put them in, put in those
factories, along the

21 time, very expensive to build a cigarette
factory, and I

22 believe the bulk of Mr. Johnston's work, all
through this

23 period related to capacity planning for
cigarette

24 production. I can tell you this, Mr.
Johnston's work was

25 not used for marketing.

3055

1 Q. Well, first of all, you have seen a number
of

2 Mr. Johnston's memos and documents, haven't you
recently?

3 A. Yes.

4 Q. None of them refer anywhere to building
factories, do

5 they?

6 A. No. And not one of them, not one of them
has any

7 statement about what to do about the situation
he observes.

8 There are no marketing recommendations or no,
even,

9 presumption of that.

10 Q. You and I have agreed you testified he's
not in the

11 marketing unit?

12 A. That's correct.

13 Q. He is a demographer?

14 A. That's correct.

sources of 15 Q. And marketing is a composite of various
16 information?
17 A. Yes.
the 18 Q. So he's just contributing his position to
19 marketing people?
but in 20 A. To the degree marketing people are copied,
21 this case they are not on these memos.
have been 22 Q. We have see a lot of memos, and people
23 copied in marketing?
people. 24 A. Marketing research, that's not marketing
25 Q. They work in the Marketing Department?

3056
provided 1 A. They don't make the decision, just
2 information.
company? 3 Q. To the ultimate decision makers in the
4 A. Right.
are where I 5 Q. Now, this particular document, and now we
6 want to be, I believe. On page 2, there is some
important 7 stuff I would like to ask you about.
8 Highlighted here is Mr. Johnston,
it's 9 important to know as much about teenage smoking
patterns 10 and attitudes. Today's teenager is tomorrow's
potential 11 regular customer. And the overwhelming
majority of 12 smokers first begin to smoke while they are in
their 13 teens.
14 First of all, you agree, do you not,
that 15 today's teenager is tomorrow's potential
regular customer;
16 you agree with that?
17 A. I think that's literally true for any
product. 18 Today's teenagers is tomorrow's potential
regular customer,
19 just like you and I today are the potential
regular 20 customer for something we buy in the future. I
see nothing 21 wrong with that comment. It does doesn't say
today's 22 smoker, it just says today's teenager is
tomorrow's 23 potential customer. I agree with that.
24 Q. In context, he's saying today's teenage
smokers?
25 A. Absolutely not. That's your
interpretation, and I

3057

1 don't accept that one iota.
2 Q. I would ask you to look at the line before
where it 3 again says, to know as much as possible about
teenage 4 smoking patterns and attitudes, that's the
focus, teenage 5 smoking?
6 A. No, I think that's a general statement.
7 Q. That's your position?
8 A. Yes.
9 Q. And then it says in the next clause there,
and the 10 overwhelming majority of smokers first begin to
smoke while 11 in their teens. You agree with that don't you?
12 A. As long as you include 18 and 19 olds as
part of the 13 teens, I do, yes.
14 Q. But going down to 12?
15 A. It could be.
16 Q. And then further on in the paragraph
highlighted it 17 says, the smoking patterns of teenagers are
particularly 18 important to Philip Morris.
19 You agree with that, don't you?
20 A. I think they are important to Philip
Morris in the 21 industry in terms of understanding what the
future size of 22 the industry may be. And I would leave it at
that. 23 Q. Well, farther down it says, furthermore,
it is during 24 the teenage years that the initial brand choices
made, at 25 least part of the success of Marlboro Red during
it's rapid

3058

1 growth period was because it became the brand of
choice 2 among teenagers who then stuck with it as they
grew older, 3 this combined with a rapid growth in absolute
number of 4 teenagers.
5 Now, there again, if the statement
is made, 6 part of the success of Marlboro Red was its
being number 7 one or brand of choice among teenagers,
correct? 8 A. He says that. Again, this doesn't
reconcile with the 9 fact that the highest level of brand switching
is in the 10 to 24 year age group, and the varied chart that
you showed 11 me a while back shows a rapid decline in
Marlboro's share

could 12 as smokers got older. So it's, it's a point we
13 debate.
14 But the fact is that the public data
did show 15 that Marlboro had the highest share of people
below 18, 16 I'm not quibbling with you on that.
17 Q. An on page 3 of this document of Mr.
Johnston's memo, 18 he talks about teenage smoking prevalence from
'69 to '74, 19 and there are two tables there.
20 And if you notice, if you will, as
21 highlighted -- excuse me, they are not
highlighted but 22 I will highlight them with my question. There
are 23 categories for table one and table two for ages
12 to 14, 24 and 15 to 16, and 17 to 18, correct?
25 A. Yes, sir. And I would point out Mr.
Johnston said

3059
overall 1 the best data I have, the best data I have on
period comes 2 prevalence of teenage smoking for the 1968-'74
the 3 from studies conducted by Chilton Resources for
4 National Clearinghouse on Smoking and Health.
5 Mr. Johnston's data for 1968 to '74
is public 6 continuing information, which is the continuing
statement, 7 that Mr. Johnston did collect data, he
assimilated data 8 from public sources, and reported on them.
9 Q. I haven't suggested that to you.
10 A. You kept talking about Mr. Johnson
claiming my data. 11 Q. He said it, not me. Here is the point,
sir. 12 A. Yes.
13 Q. He began collecting this in the late 60's,
and 14 repeatedly presented it to senior management
people in 15 marketing at Illinois Philip Morris over the
next 15 years 16 at least?
17 A. Repeatedly, I don't know we can tally it.
Maybe 18 we'll go over all of them today. My best guess,
from being 19 involved in all of this, is that Mr. Johnston
may have 20 published 10 to 12 documents over that period of
time in 21 a company where there were probably, in terms of
research 22 reports, over 800 to a thousand research reports

published

23 each year.

24 So yeah, Mr. Johnston published 12
demographic
25 studies in 15 years, correct. I'm sorry, Mr.
Johnston

3060

1 published 12 demographic studies in 15 years
that referred

2 to smokers under 18. Mr. Johnston was
extremely prolific

3 as a publisher and produced hundreds of
documents that

4 studied older people, studied women, studied
even urban

5 people.

6 Q. The subject is teen smoking. You made the
point, I

7 simply want to establish that these 15 or so
documents were

8 an estimate; there may be more he issued on teen
smoking,

9 correct?

10 A. And I just guessed 10 to 12. You said 15,
that's

11 ballpark number.

12 Q. Do you recall Mr. Johnston making oral
presentations

13 about his findings on teen smoking at Richmond?

14 A. No, I don't, I do not recall. I was in
Richmond

15 quite a bit. I recall an associate of his, Mr.
John

16 Tendel, making a ton of presentations over the
years. I

17 personally do not recall Myron Johnston ever
making a stand

18 up presentation to a group.

19 Q. Well, there has been testimony in this
record that he

20 did, and he did so once or twice a year, perhaps
more. Do

21 you disagree with that?

22 A. I don't know what disagree means. I --

23 Q. I beg your pardon?

24 A. I don't know what disagree means in this
context. I

25 don't disagree if you say to me, did you know
that he did

3061

1 that, I'm just saying I was in Richmond a lot
and I don't

2 recall Myron Johnston ever making a
presentation.

3 Q. Do you know whether any of your colleagues
from New

4 York went to such presentations?

5 A. Yeah, a number of colleagues, did -- I'm
sorry, went

6 to Richmond. I know they went to Richmond, I
don't know

7 whether they were at a presentation Mr. Johnston
made or
8 not. All I know is I don't recall Myron
Johnston, who I
9 knew, I don't recall him ever making a
presentation. I do
10 recall vividly John Tendel making a bunch of
presentations
11 of a statistical nature.
12 Q. Did Mr. Tendel discuss teenage smoking?
13 A. Not that I recall, no.
14 Q. Let's look at Exhibit 2404, please.
15 All right. Sir, Exhibit 2504 is a
January 19,
16 1983 memo again from Mr. Johnston to Mr. Zolar,
correct?
17 A. Yes, and back to our discussion earlier, I
think you
18 showed me a memo from Myron Johnston in '69 and
now '83, so
19 we are sort of picking the parameters of when he
was at
20 Philip Morris; we were trying to figure out when
he was
21 there.
22 Q. We appreciate that, sir, Mr. Zolar in
marketing gets
23 this memo called the ages at which people start
smoking,
24 correct?
25 A. Yes, sir.

3062
your
1 Q. On the second page I would like to focus
presented to
2 attention, regardless of the data source, he
3 the marketing research person information on
this chart.
4 Again, the highlighted section includes smoking
behavior of
5 people under 18, correct?
6 A. That is correct.
7 Q. And likewise, on the chart below for
females, the
8 same information is presented correct. Under
18?
9 A. Yes.
10 Q. Did you see this memo while you were at
Philip
11 Morris?
12 A. What's the date on it?
13 Q. Well, January 19, 1983.
14 A. I don't know. I don't recall it.
15 THE COURT: Let me just, we are
going to take
16 just a break for a couple minutes. I'm going
to try to
17 get some heat taken down. Why don't you remain
in your
18 seat for just a few minutes, and don't talk
about the case
19 among yourself nor with anyone else. You are

free to get
if I can
Exhibit 2336,

20 up and move around, and I'm going to try to see
21 get the temperature taken down in this room.
22 (Brief recess.)
23 THE COURT: Continue, Mr. Adelman.
24 MR. ADELMAN: Thank you, your Honor.
25 Q. Mr. Morgan, I'm going to ask you about

3063

1 that I'm going to put up. This is a memo from
1981, again
2 Mr. Myron Johnston writing to Harry Daniel.
3 Who's Harry Daniel?
4 A. My guess is Harry Daniel would have been
his boss in
5 Research and Development.
6 Q. I'll represent to you, this is copied to
Mr. Zolar
7 among other people?
8 A. Okay.
9 Q. This has to do with the federal excise tax
on
10 cigarettes. Are you familiar with that subject?
11 A. I know, yes, there was a federal excise
tax on
12 cigarettes.
13 Q. Did you read this memo while you were at
Philip
14 Morris?
15 A. Not that I know of.
16 Q. Well, does that mean you could have and
forgot, or
17 you just didn't?
18 A. It means I could have and forgot. There
is -- 1981 I
19 was there, Mr. Zolar worked for me; I could
have, but I do
20 not recall.
21 Q. Okay. Mr. Johnston, in this memo, is
bringing to the
22 attention of the readers, Teenage Smoking and
the Federal
23 Excise Tax On Cigarettes, correct?
24 A. I don't know that because I haven't -- I'm
not
25 familiar with the memo. If I could read it I
could answer

3064

1 the question.
2 Q. It's right there, and I just read the
heading to you
3 right at the top.
4 A. Right. And what was your question?
5 Q. Just to establish that it says, in black
and white
6 there, Teenage Smoking and the Federal Excise
Tax On
7 Cigarettes?
8 A. That's what it says.
9 Q. And that's what the memo is about, isn't

it?

10 A. I don't know that.

11 Q. You have seen this before today, haven't you?

12 A. I don't recall it. I -- yes, I have seen the memo, I

13 believe, in the deposition you did with me. We may have

14 talked about it. I'm not that familiar with it, but it's

15 hard for me to comment on when you say the memo is about,

16 and you said some things. I just said I'm not sure of

17 that.

18 Q. We'll see if we can remedy that this way.

19 A. Okay.

20 Q. You became aware at Philip Morris in the early 80's

21 there was a --

22 You became aware while you were at the Philip

23 Morris there was a proposal in the 80's at

24 to raise excise tax on cigarettes?

25 A. No, it sounds like I have the sudden case of amnesia,

3065

1 but I don't really recall that, that whole episode. I

2 mean, there were reasonably consistent efforts in Congress

3 to raise the federal excise tax on cigarettes

4 or so. And obviously, in the early 80's, that must have

5 been up. It's just not something that I was that deeply

6 involved in.

7 I don't recall specifically in '81 being aware

8 of the issue, but I'm certainly not quibbling with you

9 that this memo was written about it; and that it was an

10 issue you just asked me if I recall, and I said no.

11 Q. And it's an issue in this memo regarding teenage

12 smoking, is it not?

13 A. That's what it's titled.

14 Q. On to the memo, page 2 underlined, underscored. The

15 discussion here -- and please, if you need to read other

16 parts of the memo tell us and we'll let you do that. But

17 after discussing this he says the most important finding

18 and one of greatest significance to the company is the

19 calculation of price elasticity of cigarettes

among
20 teenagers.
21 Price elasticity in this case has to
do with
22 the relative choice teenagers would make to buy
cigarettes
23 or other products, isn't that true, sir?
24 A. I'm sorry, would you ask the question
again?
25 Q. Okay. In this context, price elasticity
with respect

3066
1 to teenagers is the relative choices they would
make in
2 terms of buying cigarettes or something else
depending on
3 the price, isn't that correct?
4 A. I guess so. I'm not an expert on price
elasticity,
5 but as a layman that sounds very reasonable.
6 Q. As a business person you would agree,
correct?
7 A. Yes. Not being an expert on price
elasticity or its
8 definition, I would agree.
9 Q. And in the memo there is a comparison of
what
10 teenagers might do if the excise tax were raised
which
11 would raise the gross price of cigarettes?
12 A. I have no idea.
13 Q. Would you accept that, since you have read
this memo
14 before?
15 A. I'm not familiar with it. So, I mean,
I'll accept it
16 if you say it, but you are asking me if I, you
end up
17 saying correct, and I just can't say correct,
because I
18 don't have the memo in front of me.
19 Q. Might I just hand you this?
20 If I can approach your Honor.
21 Showing you Exhibit 2336.
22 A. Okay, thanks.
23 Q. Would you review it, please, to your
satisfaction?
24 A. Okay. Back to one of your previous
questions. It
25 explains it, I think, which is, this document
does not --

3067
1 the timing of this document, it says right here,
does not
2 relate to a specific proposal to increase the
federal
3 excise tax.
4 You asked me if I was aware in 1981;
I said,
5 geeze, no. The reason is, this document was to
be written

6 in relation to a proposed excise tax. It is a
report from
7 the National Bureau of Economic Research. And
what
8 Mr. Johnston was doing, as he did, you know, in
these
9 things, was he was saying, he says in here
there hasn't
10 been a federal excise tax increase in 20 years.
I wonder
11 what would happen if there were.
12 So Mr. Johnson was hypothecating,
was not in a
13 response to a specific proposal, which explains
why I
14 wasn't that aware. I'm sorry.
15 Q. But to the point and most seriously --
16 A. Yes.
17 Q. Mr. Johnston is relating it to teenage
smoking
18 patterns, isn't he?
19 A. And alcoholic beverages in here.
20 Q. But teenage smoking patterns?
21 A. Yes, he is. That is absolutely correct,
Mr. Adelman.
22 Q. Putting that aside and moving ahead, I'll
show you on
23 the screen Exhibit 1191.
24 Now, this is a document from May 18,
1973 that
25 you got a copy of, correct?

3068
1 A. I can't tell that, but again --
2 Q. We'll show you the whole document so you
can see
3 highlighted your name?
4 A. Yes, sir.
5 Q. Do you remember getting this document?
6 A. Could you flash back?
7 No, I don't remember getting the
document, but
8 I do know the document.
9 Q. Did you read it while you were at Philip
Morris?
10 A. You know, I'm sure I did. I don't
remember, but I
11 certainly wouldn't say I didn't. I was copied
on it, I
12 generally read memos I was copied on.
13 Q. It's written by Mr. Holbert from
Marketing?
14 A. From Marketing Research.
15 Q. And he sends it to the Marketing Research
Department,
16 correct -- or excuse me --
17 A. Let's back up. Let me see the copy list.
18 Q. Let's back up to the distribution list.
19 A. No, he sends it to the Marketing
Department, not the
20 Marketing Research Department.
21 Q. I see. Okay. And you --
22 A. I was in the Marketing Department.

23 Q. Looking at the document as a whole,
underscored it's
24 entitled Incident of Cigarette Smoking, and as
highlighted
25 it talks about some research that was done
outside, okay,

3069

1 that says, in addition, those same questions
were asked of
2 a national probability sample of 452 teenagers
age 12 to
3 17, 210 male 242 female, and there it lists the
actual
4 chart there, 12 to 17, did you see that?
5 A. Yes, I do.
6 Q. Did you see that while you were at Philip
Morris?
7 A. I said I don't. I was copied on it. I
said I would
8 concede if I was copied on it.
9 Q. And there was -- there is an attachment to
it. I
10 don't need to put it up here, a series of charts
you
11 reviewed?
12 A. Yes.
13 Q. And you believe this shouldn't have been
done?
14 A. I said I was aware of 2 decisions that
were made in
15 30 years that I thought, at least certainly
looking at them
16 today, looked like very bad judgment. One was
the 1974
17 Roper report, which Philip Morris commissioned
and talked
18 to people below 18; and the other would be this,
which was,
19 it's not clear exactly what Philip Morris did
here, but it,
20 it was part of the national opinion, whatever it
was,
21 research company. And it was clear that Mr.
Holbert did
22 use, and probably I think purchased data smokers
under 18
23 from the National Opinion Research.
24 And those are the 2 instances where
I cite I
25 believe Philip Morris exercised bad judgment.

3070

1 Q. From today's perspective?
2 A. From today's perspective, again you asked
me if I was
3 aware of it, and you have asked me several times
whether I
4 did anything about it. I think again it is
important to
5 put things in context; that teenage smoking was
declining,
6 it was not a big issue back in the 70's from a

public
about the
was not an
deposition, I
enough in 1974
shouldn't be
know, I
whether, at age
teenage
the states
16, and
all. I
enough at that
not smart
say, Neal,
buy

7 standpoint. In the 70's everybody was talking
8 impact of smoking on smokers; teenage smoking
9 issue, it was declining.
10 And, you know, I think during our
11 said, Mr. Adelman, I wish I had been smart
12 to understand why this shouldn't, this survey
13 done. And I sure understand it today and, you
14 wish it hadn't been done. I don't know
15 31, with the industry being what it was with
16 smoking not being an issue, being an issue that
17 were responsible for, with purchase laws being
18 then in so many cases no legal purchase age at
19 don't know whether I would have been smart
20 point.
21 I'm sorry, the answer is no, I was
22 enough at that point, to call Neal Holbert and
23 don't do this.
24 Q. You were not smart enough at 31?
25 A. I wasn't aware enough that a decision to

3071
under 18
that's
instances in which
I've said
because I wish my
Brands
smoking dated

1 information that someone else had about smokers
2 would look the way it would look 20 years later,
3 what I was not smart enough. And the 2
4 it was done, I have said, and you have asked me,
5 a number of times, I'm embarrassed by it,
6 company were perfect, and it's not.
7 Q. What was your position in 1974?
8 A. I was probably just ending up my role as
9 Manager on Marlboro.
10 Q. And becoming what?
11 A. Assistant Director of Brand Management.
12 Q. Of Philip Morris?
13 A. Of Philip Morris, USA.
14 Q. Yes. Let me show you Exhibit 1580.
15 Now, this is a memo on teenage
16 1975 from Mr. Holbert to Mr. Zolar, correct?
17 A. Zolar, yes.
18 Q. Both in marketing?
19 A. Both in marketing research.

Philip Morris 20 Q. And a tracking study is something that
21 engaged in in order to determine information
relative to
22 marketing, correct?
23 A. It was a compilation of statistical
information, yes.
24 Q. And Philip Morris compiled the
information, correct?
25 A. Yes.

3072

1 Q. The subject of this memo is indeed a
tracking study,
2 isn't it?
3 A. Yes.
4 Q. And, as underlined there, it says, from
Holbert to
5 Zolar, we have an operational decision to make
on what age
6 to use as a low end in working out incidence,
consumption
7 and brand usage patterns in connection with our
1977
8 tracking study, correct?
9 A. Correct.
10 Q. And our means Philip Morris, correct?
11 A. Correct.
12 Q. And the data listed below is, of course,
outside
13 information, I believe, provided by --
14 A. HEW.
15 Q. HEW, correct?
16 A. Yes.
17 Q. And that goes all the way down to 12 year
olds,
18 correct?
19 A. The HEW data does, yes.
20 Q. And it's put into a Philip Morris memo,
isn't it?
21 A. Yes.
22 Q. And then he concludes, the writer, Mr.
Holbert, a
23 Philip Morris official. These data suggest we
use 15 as a
24 base, correct?
25 A. That is correct. And it was not done.

3073

1 Q. You say it wasn't done?
2 A. No. Mr. Zolar, there is a memo I believe
that shows
3 that Mr. Zolar responded to this by saying, no,
we are not
4 going to do that.
5 Q. Did you see a copy of this memo, Exhibit
1580, while
6 you were at Philip Morris?
7 A. Not that I'm aware of. It looks like it
is internal
8 to the Research Department.
9 Q. Okay. And finally, sir, Mr. Johnston was
employed by

10 Philip Morris when you left in 1983?
11 A. Yeah, we saw a memo that was basically in
that time
12 frame.
13 Q. Nobody fired him?
14 A. I do not believe Mr. Johnston was fired, I
believe he
15 retired a normal retirement.
16 Q. He wasn't disciplined, was he?
17 A. I don't know. He never worked for me so I
can't
18 answer that.
19 Q. You don't have any knowledge of that, do
you, sir?
20 A. No, I do not.
21 Q. If I may have 2125 displayed, please.
22 Now, you know Mr. Dunn?
23 A. Barely.
24 Q. Okay, you know who he was?
25 A. Yes.

3074

1 Q. What was his job there?
2 A. Mr. Dunn was actually -- I don't know what
he did, I
3 mean I don't know his title. He wrote a lot of
stuff about
4 psychology. He was sort of in the psychological
area,
5 would make -- Myron Johnston was in the
statistical area,
6 sort of a free spirit thinker.
7 Q. Who's the free spirit you are talking
about?
8 A. I think Myron Johnston was a free spirited
thinker
9 and I think also Bill Dunn was a free spirited
thinker and
10 was encouraged to do so.
11 Q. Mr. Dunn's memo to Mr. Seligman is
exhibited, and the
12 second paragraph, if you will, it's underscored
as follows,
13 even if only some smokers smoke for the nicotine
affect, I
14 personally believe most regular smokers do, then
in today's
15 climate we would do well to have allow TPL and
CO
16 delivering cigarettes that can displace
nicotine?
17 Do you agree with that?
18 A. Yes, I do.
19 Q. Do you believe that most smokers smoke for
the
20 nicotine effects?
21 A. No, I don't?
22 MR. LERMAN: I object to the line of
23 examination; it exceeds the scope and line of
questioning
24 of direct.
25 THE COURT: Sustained.

3075

1 BY MR. ADELMAN:
2 Q. May I have Exhibit 1411 placed up there,
please.
3 Now, Mr. Morgan, here is a memo that
you wrote.
4 You are familiar with it, are you not?
5 A. Yes, I am.
6 Q. Okay. Who's Mr. Landry, by the way?
7 A. Mr. Landry was my boss in '75. If I were
Assistant
8 Director of Marketing, at that point he was the
head of
9 Marketing, Jack Landry.
10 Q. And here you raise an issue of the
marketing efforts
11 of RJR versus Philip Morris, correct?
12 A. Yes, I did.
13 Q. You at Philip Morris certainly paid
attention to the
14 marketing of your the other cigarette companies,
did you
15 not?
16 A. Mr. Adelman, we, I think we paid attention
to
17 everything; we paid attention to their
marketing, their
18 sales force, their product, their packaging,
that's what
19 competition is in an industry. So the answer is
20 unequivocally, yes. And we paid attention to
all of our
21 competitors.
22 Q. All right. In particular, this memo is
about
23 marketing differences with respect to nicotine
delivery on
24 major brands including Marlboro, right?
25 A. No. This is a quibble, but it's an
important

3076

1 quibble. You said this is about marketing
differences, and
2 in fact the memo says, in addition to possible
marketing
3 differences -- this memo is about product
differences, not
4 about marketing differences.
5 Q. The first sentence of the memo says, as
you know, we
6 are examining the marketing efforts of RJR
versus pH during
7 the last few years that might explain the
differences in
8 market performance we are experiencing?
9 A. That's correct.
10 Q. And the next paragraph talks about a
product
11 difference. It says, in addition to possible
marketing
12 tests for product differences.
13 Let's talk about that. As you

write, one
two
RJR has held
constant
not
results of
the
strategy or

14 substantial product line difference between the
15 companies, in the period since January, 1973,
16 nicotine deliveries on their major brand pack
17 while our nicotine deliveries have all dropped
18 substantially referencing the attachment?
19 A. Yes, sir.
20 Q. And that includes Marlboro, correct?
21 A. Yes, sir.
22 Q. And then you raise the point of, while I'm

3077
past two
but not go
difference,
page.
attachment
delivery
Winston King,
is a
during that
take this way
a memo from

1 technology between the two companies during the
2 years?
3 A. That's what it says.
4 Q. And then on the chart, which we'll look at
5 through, it's on the next page, you show the
6 for instance, in the nicotine delivery?
7 A. Excuse me. The next chart's not up.
8 Q. Oh, it sure should be. On the second
9 Can you see that from where you are?
10 A. Yes, I can.
11 Q. And I'll represent to you that this is the
12 to this memo?
13 A. Yes, it is.
14 Q. And there is a comparison of the nicotine
15 between, for instance, Marlboro Red soft and
16 correct?
17 A. Yes.
18 Q. You point out that by March of '75 there
19 difference of point 3?
20 A. Yes, that Marlboro's nicotine had lowered
21 time and Winston's was held constant.
22 Q. Were Marlboro sales dropping at that time?
23 A. No, they were not.
24 Q. But you raise the point, and then I'll
25 and get to the next memo which is 1416, here is

3078
will be put
2 up in a second. This is May 5th, 1975,

responding to your

3 memo that we just saw, who's Mr. Goldsmith?

4 A. Mr. Goldsmith, I know who he is, I'm
trying to time

5 frame it. Mr. Goldsmith in 1975 was either, he
was either

6 the Executive Vice President of Operations, or
he was

7 President of Philip Morris, USA.

8 And I can answer that question,
because I see

9 Mr. McDowell's name there, Mr. Goldsmith would
have been

10 President of Philip Morris, USA at this time.

11 Q. The President got the memo copied to you,
the second

12 paragraph is what I want to refer you to. This
here is

13 Mr. Landry saying, we have all acknowledged on
many

14 occasions over the years that competitive
nicotine

15 deliveries are of utmost importance especially
in our full

16 flavor brands.

17 Full flavor brands means high
nicotine, doesn't

18 it?

19 A. No.

20 Q. Do you have more to say?

21 A. It means full flavor in the industry.
Actually, I

22 want to back up. I was a little fast with my
answer.

23 Full flavor, when you say full
flavor to a

24 cigarette person it means the big taste brands;
Marlboro,

25 Winston, Camel, Kool, and, yes, I was fast,
yes, those

3079

1 brands, generally the full flavor version, have
higher tar

2 and nicotine than the light versions, that is
correct.

3 I'm sorry, your statement is correct.

4 Q. Thank you. The next sentence. The fact
that

5 Marlboro nicotine delivery has dropped so
sharply below

6 that of Winston is particularly alarming to me;
I believe

7 it puts us at a competitive disadvantage.

8 Do you agree with the statement that
the drop

9 in Marlboro's nicotine delivery puts Marlboro
at a

10 competitive disadvantage? Do you agree with
this

11 statement?

12 A. No, I don't agree with it. I believe just
the

marketplace 13 opposite, actually, in the terms of the way the
14 played out.
15 Q. You wrote this, right?
16 A. I didn't write this memo.
this 17 Q. Please, you wrote the memo that initiated
18 response, correct?
19 A. Yes.
the 20 Q. Do you know whether after this, May 1975,
increased? 21 nicotine delivery level of Marlboro was
22 A. I believe it was not increased.
23 Q. Do you know that for a fact?
24 A. I do not know that for that fact.
25 Q. While you were at Philip Morris, did you
come to know

3080

1 Mr. Thomas Osdene?
2 A. I -- yes, I knew who he was.
3 Q. And you knew him at Richmond?
4 A. I knew he worked in Richmond.
5 MR. LERMAN: Your Honor, again I
think we are 6 moving beyond the scope of this witness's
direct 7 examination.
8 THE COURT: What is this in response
to? 9 MR. ADELMAN: Your Honor, I am going
to talk to 10 him about the issues pertaining to Mr. Osdene's
note, and 11 the issues of destroying research results, and
the 12 gentlemen's agreement that relates to that.
13 MR. LERMAN: Your Honor, I object to
-- 14 Mr. Morgan is offered here as a fact witness,
not an 15 expert. He testified in marketing areas, I
don't think 16 that's a reason to throw documents in front of
him. 17 THE COURT: Let me just ask counsel
to 18 approach.
19 (The following discussion was
conducted at the 20 side bar between court and counsel, out of the
hearing of 21 the jurors, as follows:)
22 THE COURT: The question, do you
have anything 23 specific where he was personally involved or,
are you just 24 going to go through documents that other
witnesses may be 25 able to testify to or that haven't already been
seen by

3081

1 the jury?
2 MR. ADELMAN: Well, your Honor, I do
have some
3 related to him and some issues related to him.
But he's
4 presented here as CEO and President of the
company, and I
5 think we are entitled, as we were with Mr.
Brooks, to
6 explore. I don't want to take a lot of time, I
know the
7 Court's feeling on that.
8 THE COURT: These things we have
already seen.
9 MR. ADELMAN: This -- I'll proffer
up on it
10 when I get to it, your Honor. I want to ask
him whether
11 he was aware, as we have heard testimony from
Dr. Ferron,
12 of the gentlemen's agreement, what he knows
about that.
13 After all, he was, at this time, your Honor,
the Senior
14 Vice President in the company, spent a lot of
time in
15 Richmond. I think it is an important question
for the
16 jury on this issue.
17 MR. LERMAN: Your Honor, can I just
respond
18 briefly. Mr. Morgan was available to the
plaintiffs for
19 deposition, in fact they designated portions of
his
20 deposition and played them in this case. If
they wanted
21 to examine him on that issue and play portions
of his
22 deposition on that issue, they could have done
that. They
23 knew he was the CEO when they took his
deposition in
24 November in the ironworkers case. They didn't
do that.
25 I put him on the witness stand to
talk about

3082

1 marketing issues, and now for them to say you
were at the
2 company, do you know Osdene, did you know
Ferron did that,
3 there is absolutely no testimony on direct that
relates to
4 any of those to be topical.
5 THE COURT: I think within the
discretion,
6 although I've kept the parties to more or less
strict
7 conformity which was brought out on direct, I
would allow

8 it; but excepting I don't want to go into just
throwing
9 other documents, unless there is something he
has personal
10 contact with. So if you represent that you are
going to
11 ask him questions that he had some personal
contact with,
12 then I would allow it, but I don't want you
just putting
13 in documents that you just retrace the
generalized theme,
14 especially documents that have already been
seen by
15 someone else.

16 MR. ADELMAN: I would tag that
ruling, I would
17 like to ask him about the gentlemen's agreement
without
18 documents, because it relates to the testimony
the jury's
19 heard.

20 THE COURT: Okay. I'll allow that.

21 MR. LERMAN: But your Honor, if I'm
22 understanding Mr. Adelman, he doesn't have any
basis for

23 believing that Mr. Morgan has specific
knowledge on those
24 areas or involvement. What he wants to do is
say, there
25 is an allegation in this case regarding a
gentlemen's

3083
1 agreement, do you know anything about it. And
that's,
2 that's a different kind of exploration that
allows him to
3 take every allegation in the case and throw it
in front of
4 this witness.

5 MR. ADELMAN: I'm not going to do
that.

6 THE COURT: Let's see where it goes.
I'll
7 allow it generally to start with; if it seems
to go too
8 far and you want to raise an objection, I'll
hear it.

9 MR. LERMAN: Thank you, judge.

10 BY MR. ADELMAN:

11 Q. Mr. Morgan, let me ask you this.

12 During your tenure at Philip Morris
rising to
13 the level of President and CEO, did it ever
come to your
14 attention that there was an agreement between
Philip
15 Morris and other companies not to do biological
research

16 in the United States?

17 A. No, sir.

18 Q. You never heard of that?

19 A. No, sir.
20 Q. There has been testimony in this record
from a
21 witness who worked with the Philip Morris
laboratory in
22 Richmond, that several people, including Mr.
Osdene and
23 other senior officials, told him there was such
an
24 agreement.
25 MR. LERMAN: Your Honor, I object to
the form

3084

1 of the question.
2 THE COURT: I think the form of the
question is
3 improper. I'll sustain the objection.
4 BY MR. ADELMAN:
5 Q. Withdraw that question. Did you ever talk
to
6 Mr. Osdene as to whether there was a gentlemen's
agreement
7 not to do biological research in the United
States?
8 A. Sir, I said I wasn't aware there was such
an
9 agreement. I couldn't have talked to him.
10 Q. An agreement of any sort?
11 A. No, it was not my area.
12 Q. Do you believe that smoking causes
disease?
13 A. You and I had talked about this in
deposition. I
14 believe that smoking is definitively a risk
factor in
15 disease, I think the statistics that associate
cigarette
16 smoking with various kinds of disease are
irrefutable.
17 When you say cause, I pull back a little on two
bases; one,
18 the possible definition of cause, suggesting
that if you
19 smoke you are going to get these diseases, which
is not
20 true; and cause, I back off from the word cause
because,
21 while the statistics are irrefutable, and well
known, the
22 mechanism by which someone smokes a cigarette
and may get
23 lung cancer is still not understood in terms of
the
24 medicine of it. So cause is too direct a word
for me as a
25 layman.

3085

1 But if the simple question is, if
you smoke do
2 you run a higher risk of getting of a number of
diseases,

3 the answer is clearly, yes, sir.
4 Q. And you so advised your children, haven't
you?
5 A. I told both of my girls I did not want
them to make a
6 decision about cigarette smoking until they were
18.
7 Q. And the diseases we are talking about,
cancer and
8 emphysema, high blood pressure, heart disease
and so forth,
9 correct?
10 A. Yes, sir.
11 Q. You began smoking at 13 or 14?
12 A. Yes.
13 Q. You smoked a pack a day from the time you
started at
14 Philip Morris in 1963 up until about 1987,
correct?
15 A. I don't know why you stopped at '87, but,
yes.
16 Q. In 1987, or thereabouts, your lung
collapsed; didn't
17 it?
18 A. I had a spontaneous pneumothorax.
19 Q. And the court reporter would like you to
spell that.
20 A. The court reporter's out of luck.
21 Q. But your lung collapsed, didn't it?
22 A. Yes.
23 Q. And you stopped smoking, didn't you?
24 A. I stopped for about 6 or 8 months, yes.
25 Q. While your lung was healing?

3086

1 A. Yes.
2 Q. And then you resumed smoking?
3 A. Yes.
4 Q. Do you smoke today?
5 A. Yes.
6 Q. At what rate?
7 A. Today? Or you mean generally?
8 Q. Generally.
9 A. Generally I smoke about 14, 16 cigarettes
a day.
10 Q. Is nicotine addictive in your judgment?
11 A. No, it's not. We discussed this in the
deposition.
12 Q. Is it a drug?
13 A. That I'm not so sure about, because I
don't know the
14 definition. I believe it's a pharmacological
agent, yes.
15 Q. Is cigarette smoking addictive?
16 A. I think cigarette smoking is habit
forming, I don't
17 believe it's addictive in the context of which
the medical
18 definition of addiction plays out. But I think
for people
19 who smoke, that cigarette smoking is a pleasure,
I think
20 it's a comfort, and I think it's,

psychologically, it's a

21 psychological habit.

22 Q. A psychological habit?

23 A. I believe so.

24 Q. And you have that habit?

25 A. I do, but I've stopped three times, as 50

million

3087

unbreakable 1 Americans have also stopped, so it's not an

2 habit, or it's not an unbreakable pleasure, but

3 definitively a pleasure for those who smoke.

Disease 4 Q. Are you aware that in 1994 the Center for

5 Control an in an official statement said or

6 approximately 3 million adolescents are smokers

7 smoke nearly one billion packs of cigarettes a

year. Did 8 you know that in the end of 1994?

9 A. I don't recall that number.

at which 10 Q. Also CDC said at that time the average age

11 smokers try their first cigarette is 14 and a

half years; 12 and approximately 70 percent of smokers become

regular 13 smokers by age 18?

that's one of 14 A. Right, I'm aware generally of that, and

15 the reasons why I think Philip Morris has youth

16 turned back up in the 1993 period. That's one

Action 17 reasons why Philip Morris started programs like

18 Against Access to add on top of the programs and

19 self-regulations that had existed for 20 years.

kidding 20 Philip Morris, as I said, I'm not

21 around on this, Philip Morris's position is

22 not smoke, and I believe they shouldn't smoke.

I believe 23 access should be denied and I believe that we

really need 24 to make smoke, the decision to smoke an adult

decision 25 because there is risk in it.

3088

1 Q. You never said that in the 60's, did you?

2 A. No, sir.

3 I'm sorry may I answer.

4 Q. You never said that in the 60's, did you?

the way I 5 A. I said it by my actions, sir, I said it by

6 managed what I was responsible for, and made

sure as best I 7 was able to do that. Cigarette marketing was

not directed
8 at people below the legal age. I did in the
70's the same
9 way, I instituted programs that put buffer zones
in our
10 promotional programs, I think as I look back, in
spite of
11 the Myron Johnston's memos, which is a
statistical person
12 observing the market place.
13 I was there, I know what decisions
were made, I
14 know what decisions I made. And I want to tell
you
15 something, I know those memos, I know 2 times
Philip
16 Morris made bad judgments about conducting
research, but I
17 am really, frankly, very proud of the effort
over 30 years
18 the people at Philip Morris put into acting
reasonably and
19 diligently in not marketing to youth, and I
just believe
20 that.
21 Q. My point was, Philip Morris never made
those
22 statements as a company in the 1960's?
23 A. That kids shouldn't smoke.
24 Q. Yes?
25 A. I disagree with you. I know a memo from
1936 that I

3089
1 have seen where someone, a Philip Morris person,
wrote and
2 acknowledged that we shouldn't sample people
under age in
3 1936. I don't agree that Philip Morris didn't
say that in
4 1960.
5 Q. You don't have any documents to show that,
do you?
6 A. I have a cigarette advertising code that
says, I
7 mean, that's a document, sir, you have documents
that
8 suggest that Philip Morris knew this and knew
that. I have
9 documents that said, Philip Morris did this and
did that.
10 And what Philip Morris did was put in codes and
11 restrictions.
12 And without trying to sound
argumentative, you
13 also have 250 thousand documents out of Philip
Morris's
14 Marketing Department, you have had that ever
since the
15 Minnesota trial started and still today. We
talked about
16 this. Not one document has shown that says
Philip Morris

17 did this, planned this, evaluated this. And
the reason
18 is, it just didn't happen. I was there I know
it didn't
19 happen.
20 Q. All right, sir. Are you aware, in 1994,
again, CDC
21 stated in its official report of the 1,031
current smokers
22 age 12 to 18 years interviewed in 1993, 724
reported they
23 usually bought their own cigarettes, the brand
they usually
24 bought was, for 702, 97 percent. Marlboro,
Camel and
25 Newport were the most frequently purchased
brands for 86

3090
1 percent of the adolescents, and Marlboro was the
most
2 commonly purchased brand for both male and
female smokers
3 listing 59 percent and 61 percent.
4 A. I'm aware that Camel and Newport and
Marlboro, I
5 thought it was about 80, you just read, I'm
aware that
6 those three brands have that kind of share in
that age
7 group. And I believe the reason is peer
pressure and peer
8 influence.
9 Q. All right, sir. And finally, the CDC
stated among
10 adolescents Marlboro was the most commonly
purchased?

11 A. We have said that a number of times.
12 Q. You agree with that?
13 A. Yes.
14 Q. That's been true since the 1960's?
15 A. No.
16 Q. Wasn't Marlboro the number 1 selection of
teenagers,
17 people under 18, when you were supervising the
Marlboro
18 brand, in those years?

19 A. I believe so.
20 MR. ADELMAN: Thank you, sir.
21 THE COURT: Any redirect?
22 MR. LERMAN: Briefly, your Honor.
23 REDIRECT EXAMINATION
24 BY MR. LERMAN:
25 Q. Good morning ladies and gentlemen. Good
morning

3091
1 Mr. Morgan.
2 A. Good morning, sir.
3 Q. I want to show you a document that counsel
showed you
4 before; it's Plaintiffs' Exhibit 1580?
5 A. Yes, the Holbert memo recommending,

looking at lower

6 age group and tracking study.

7 Q. When counsel showed you this document he pointed to

8 the last sentence, where my finger is right here, and it

9 says these data suggest that we use age 15 as a base?

10 A. That's correct.

11 Q. What didn't come up on the screen was the sentence

12 below where it says, may I have your reaction, thank you?

13 A. Right. I think I covered that because I knew that

14 observation or point of view by Mr. Holbert was turned down

15 by his boss.

16 Q. So this was a suggestion that was rejected?

17 A. Yes, sir.

18 Q. And you know that because you were there?

19 A. Yes. And as I said, I believe there were only two

20 instances where Philip Morris proactively looked at the

21 below 18 by it's own initiation the 74 Roper study and

22 Opinion Research, and that's the two times --

23 Q. Were any of the documents shown to you by Myron

24 Johnston documents, the Roper study, the other study where

25 information was purchased, were any of those documents, or

3092

1 the information in those documents, used to target under

2 age smokers with marketing and promotion campaigns at

3 Philip Morris?

4 A. No, sir, we didn't do that.

5 Q. You said you weren't smart enough at the time to

6 stand up and say we shouldn't have documents like this in

7 our file?

8 A. No. May I interrupt. That we shouldn't do it. It's

9 not a question of having documents in our files, it's that

10 we shouldn't have done it.

11 Q. Were you smart enough at the time you were at Philip

12 Morris, from 1963 until the mid-1990's, to not market to

13 kids under 18 years?

14 A. Yes, sir.

15 MR. LERMAN: I have nothing further, your

16 Honor.

17 THE COURT: Thank you.

18 Thank you, Mr. Morgan.
19 The defense can make an interim
argument, if
20 you wish. This is an opportunity -- do you
wish to
21 Mr. Lerman? And you can step down and you can
step down.
22 Just make sure if there are any documents there
you leave
23 them with us. Thank you, very much. You can
leave.
24 MR. LERMAN: Yes, I do, your Honor.
25 THE WITNESS: Should I just sit back
here?

3093

1 THE COURT: You are welcome to stay
or welcome
2 to go.
3 Mr. Lerman.
4 MR. LERMAN: Thank you, your Honor.
5 Good morning ladies and gentlemen.
We have now
6 heard from Jim Morgan, who was responsible for
much of the
7 marketing at Philip Morris from 19, the
mid-1960's all the
8 way to the mid-1990's. He came in here
voluntarily --
9 he's retired from the company -- to state a
position that
10 he obviously feels intensely about. And I ask
you that
11 you judge his credibility and his testimony
about what he
12 had to say. He's a man who stepped up to the
plate on
13 those documents and reports that he thought
shouldn't have
14 been done, and stepped up to his own
shortcomings for not
15 being more affirmative in making sure that
stuff wasn't
16 done.
17 But what he told you, and what's
important
18 about Morgan's testimony, is that what Philip
Morris did
19 over the time that he was there, was not tract
18 and
20 under smokers, they did not conduct routine
surveys. If
21 you read those Myron Johnston documents, he's
talking
22 about my best data; and there are gaps of 7 and
8 years
23 between one Johnston memo and another. This is
not
24 a company that was interviewing 16 and 17 year
olds to
25 find out what they were smoking and why and
what

3094

1 advertising campaign worked and what didn't.
In fact,
2 their advertising campaign has stayed the same
for 35 to
3 40 years.
4 This was a company that had a
policy, from the
5 time Morgan got there until the time he left,
no marketing
6 targeting people under the age of 18, period.
There is
7 250 thousand documents Mr. Morgan testified,
that are
8 available to the plaintiffs in this case.
There are
9 marketing plans, brand plans and media plans
for every
10 brand they market, including Marlboro. And you
didn't see
11 one document from the plaintiffs, not one
marketing plan,
12 media plan, brand plan, that they showed Mr.
Morgan that
13 indicated under 18 year olds were targeted.
14 Ladies and gentlemen, the evidence
in this case
15 is that Philip Morris did not target under age
smokers;
16 that the decision to smoke is not a decision
that's
17 affected by advertising; it's not a picture in
a magazine
18 or a billboard that teaches a kid to begin to
smoke.
19 Those are personal decisions, complex
decisions, based on
20 family and friends and social influences, and
peer
21 influences, it's not a picture of a cowboy.
22 THE COURT: Thank you, Mr. Lerman.
23 MR. LERMAN: Thank you, your Honor.
24 THE COURT: Mr. Adelman.
25 MR. ADELMAN: Ladies and gentlemen,
the

3095

1 allegations in this complaint, as you know, run
back to
2 the 1950's. I think one thing we can all agree
is that
3 Mr. Morgan didn't expect that he would be here
on the
4 stand back, or now in 1998 answering questions
about what
5 happened in 1960's and 1970's and 1980s.
6 It's nice to say, yes, we have
started these
7 programs in 1996, keep kids from smoking, fine.
They
8 didn't to that in the 60's and 70's and 80's.
9 Next, ladies and gentlemen, next,
even in 1996

10 what they did in response to criticism, you
heard it came
11 from high government officials and important
public health
12 people.
13 Also, ladies and gentlemen, Mr.
Myron Johnston,
14 was writing documents to all of these people,
not only
15 Mr. Morgan but other people had access to them.
He's
16 repeatedly talking about smoking patterns of
people under
17 18. Do you think that if he was doing
something they
18 didn't want him to do, he would continue to do
it for 15
19 years? Do you think that if you were doing
something they
20 didn't want him to do, he would be giving
presentations,
21 as Dr. Ferron told you in his testimony, down
in Richmond.
22 Should it embarrass Mr. Morgan today? It
should, it
23 definitely should.
24 And finally, ladies and gentlemen,
in this case
25 we have alleged a conspiracy, in other words
acts done by

3096
1 people including these defendants. You come to
see, come
2 to see here that sometimes conspiracies are
hidden,
3 covered up, kept secret. Sure, they are
sending
4 information about teen smoking to the marketing
people,
5 but you don't expect to find somebody sitting
around in
6 marketing saying let's go get those 12 year
olds. The
7 proofs in the pudding you know.
8 And even Mr. Morgan agreed in his
testimony
9 that it was Philip Morris, particularly
Marlboro, led the
10 league, was number 1 in acceptance in smoking
by
11 teenagers. That's the evidence you have to
decide this
12 case on.
13 THE COURT: Thank you, Mr. Adelman.
14 MR. ADELMAN: Thank you, your Honor.
15 THE COURT: Would the defendants
call your next
16 witness.
17 MR. LERMAN: Thank you, your Honor,
we call
18 Professor Lucy Henke.
19 THE COURT: Do you want to come

forward, ma'am.

20

LUCY L. HENKE

21

called as a witness by and on behalf of the

Defendant,

22

being first duly sworn, was examined and

testified as

23

follows:

24

THE COURT: If you'll state your

name and spell

25

your last name for the court reporter.

3097

1

A. Okay. My name is Lucy L. Henke,

H-E-N-K-E.

2

DIRECT EXAMINATION

3

BY MR. LERMAN:

4

Q. Good morning, Professor Henke?

5

A. Good morning.

6

Q. Just for logistical purposes, that's a

microphone in

7

front of you, and if you speak into it it will

amplify your

8

voice.

9

And Professor Henke, let me start

out by asking

10

you right to the point. Does cigarette

advertising and

11

promotion cause kids to start smoking?

12

A. No.

13

Q. Why not?

14

A. The decision to start smoking is a very

complex

15

decision, it's based on a whole host of factors.

And what

16

we see from the research is that friends and

family are the

17

greatest influencers of that decision whether or

not to

18

smoke, not advertising.

19

Q. Well, if tobacco advertising doesn't cause

kids to

20

start smoking, then can you tell the ladies and

gentlemen

21

of the jury exactly what it does?

22

A. Yes. Tobacco advertising is brand based,

the effect

23

of tobacco advertising is primarily to reinforce

brand

24

loyalty among current users; and secondarily, to

attempt to

25

influence the users of other brands to switch to

the brand.

3098

1

Q. Professor Henke, let me take the time to

introduce

2

you then to the jury by talking a little bit

about your

3

background.

4

How long have you been studying

advertising and

5

marketing communications and promotion?

6

A. I've been in this field for about 25

years.

7 Q. And what's your current position?

8 A. I'm a tenured Professor of Marketing at
the

9 University of New Hampshire.

10 Q. And what courses do you teach at the
University of
11 New Hampshire?

12 A. I teach a variety of courses. I'm in the
Department
13 of Marketing, and courses I teach are at the
undergraduate
14 and graduate levels in introduction to
marketing, marketing
15 principles, consumer behavior, advertising and
promotion,
16 marketing research, marketing workshops, direct
marketing,
17 electronic commerce and communication, marketing
strategy,
18 those kinds of courses.

19 Q. And Professor Henke, could you briefly
kind of give

20 us a rundown down of your educational
background?

21 A. Yes, I received my undergraduate degree in
Louisiana,
22 at Louisiana State University in New Orleans.

After that I
23 went to the University of Massachusetts in
Amherst, where I

24 received my masters degree and Ph.D in
communications
25 studies.

3099

1 Q. Now, what is communications studies?

2 A. Communication studies covers a very broad
range of
3 topics. But my focus in communication studies
was the
4 social impact of mass media. And my specialty
within that
5 area was children and advertising.

6 Q. Okay. And what did you do after you got
your, well,
7 what was your, you talked about your
dissertation work.

8 What was that, briefly?

9 A. Well, my dissertation was developing a
non-verbal
10 methodology to interview children to determine
what exactly
11 they knew about advertising. Up until that
time, it was
12 thought that children really didn't understand
the
13 difference between, say, commercials and
programs, they
14 couldn't distinguish the selling intent of ads.
And a lot
15 of the reason for that thinking was because of
the kind of

16 methodology that was being used to interview
children, most
17 of the studies had asked them to articulate a
verbal
18 response to open-ended questions, like what is a
TV
19 commercial, and we were finding that kids didn't
know until
20 they were about 12 year old what a TV commercial
was.
21 What my thinking was, was that if we
were able
22 to not intimidate children, and allow them to
respond in
23 a way that they could demonstrate their
understanding of
24 what a commercial was, we would get a better
assessment of
25 what they understood.

3100
1 And, in fact, using non-verbal
methodology,
2 which allowed them to shift pictures around
rather than to
3 answer sophisticated questions in sophisticated
ways, we
4 found children understood a lot more about ads
than we
5 previously thought at much younger ages. And
that was my
6 dissertation.

7 Q. Now, while you were pursuing your
dissertation, were
8 you also working in the private sector in the
marketing
9 area?

10 A. Yes, I was. I was working at Lewis Harris
and
11 Associates while I was finishing up my graduate
work.

12 Q. Lewis Harris and Associates is probably
known to most
13 people as a political polling firm. Do they
have any
14 marketing functions?

15 A. Yes. In fact, I think a lot of people
probably heard
16 of the Harris poll, but what really drives that
company is
17 the consumer research which is done which you
really don't
18 hear that much about because most of it is
proprietary.

19 Q. What sort of work did you do for Harris?

20 A. I was a Senior Analyst and I was directing
and
21 conducting studies for many different clients
that Harris
22 has. The studies range from feasibility
studies, where
23 people wanted to see if there was a market for
certain

24 kinds of product, assessment of consumer
perceptions,
25 where, for example, companies might need to know
about

3101

1 their strength and their weaknesses in order to
build
2 public relations programs.
3 And another type of study would have
been
4 advertising tracking, which I did for some
clients, in
5 which case you determine how effective your ad
campaign is
6 by interviewing the people that you have
identified in
7 your target market.

8 Q. Can you talk a little bit about
advertising tracking?

9 What does that word consist of?

10 A. For advertising tracking, your ad campaign
would
11 first identify specific objectives that you want
to reach
12 with a target market. And before the campaign
begins, what
13 you would do is identify a sample that
represents your
14 target and get their perceptions about your
product, about
15 competing products, about advertising that they
may have
16 seen as a baseline measure.

17 And then once the campaign begins,
you go back
18 into that sample, or an equivalent sample, and
ask the
19 same questions, to see if there are changes
over time in
20 their perceptions, in their awareness of your
brand, in
21 their understanding of the image that you are
trying to
22 convey, to see exactly how close to your
objectives you
23 have come.

24 Q. Okay. And after you -- how long did you
work at
25 Harris?

3102

1 A. I worked at Harris until about 1982, two
or three
2 years.

3 Q. And then did you work at another company
in private
4 practice?

5 A. Yes, I did. From Lewis Harris I went to
ABC
6 Television in New York and I did much of the
same kind of
7 work. But of course that was focusing on ABC's

interest,
8 and so my work focused on assessing the
attitudes, the
9 perceptions of the audience for network
television news
10 programs.
11 Q. Okay. Now, when did you begin your
teaching career?
12 A. Well, I began teaching as a graduate
student in 1976,
13 but I went to teaching full time from ABC, when
I started
14 at the University of Kentucky as an Assistant
Professor in
15 the Department of Marketing.
16 Q. What sort of courses did you teach at
Kentucky?
17 A. In Kentucky I taught at the undergraduate
level and
18 also the Ph.D. level. There is a Ph.D. program
there in
19 the marketing courses, primarily consumer
behavior,
20 advertising and promotion, marketing research,
marketing
21 principles.
22 Q. And where did you go from the University
of Kentucky?
23 A. From the University of Kentucky I went to
the
24 University of Massachusetts in Lowell, where I
joined the
25 Marketing Department and received early tenure
at that

3103
1 University.
2 Q. And receiving early tenure means what?
3 A. It means, based on my performance, the
University
4 asked me to become a permanent member of the
faculty before
5 the usual 6 year period.
6 Q. And then when did you join the University
of New
7 Hampshire faculty?
8 A. In 1992 I began at the University of New
Hampshire.
9 Q. And that's where you are today?
10 A. That's right.
11 Q. Now, during the course of your teaching
career have
12 you had occasion to consult with other companies
on
13 marketing related issues?
14 A. Yes.
15 Q. And, specifically, some time in the early
to
16 mid-1990's, on occasion did you consult with
17 representatives from some of the defendants in
this case on
18 research that you were doing?
19 A. Yes, I did.

20 Q. Now, during that time period, has any of
the research
21 that you have done been funded by the tobacco
companies?
22 A. No.
23 Q. Has any of the research that you have done
been
24 directed by the tobacco companies?
25 A. No.

3104
1 Q. And have the results been directed by the
tobacco
2 companies?
3 A. No, they have not.
4 Q. So, as you appear here today, the research
that you
5 have done has been independent of the tobacco
companies, is
6 that fair?
7 A. That's right.
8 Q. Now, can you tell the jury a little about
it, about
9 some of the research that you have done?
10 A. Well, I have mentioned my dissertation,
which was
11 from 1980. I have followed up that work, with
an extension
12 of that study, essentially confirming the
results that very
13 young children do understand the difference
between
14 programs and ads. And also, finding that
children
15 understand the concept as a fairly sophisticated
concept of
16 market segmentation that some programs and ads
are directed
17 at certain audience members and not others. So
those were,
18 there were studies in the early 80's relating to
that.
19 Probably with regard to our interest
here
20 today, I would next point to a study in 1995
that was
21 published in the journal of advertising
research.
22 Q. Is it fair to say, Professor Henke that
most of the
23 research you have done over the last 15 years or
so has
24 dealt with the issue of marketing and
advertising and it's
25 affect on children?

3105
1 A. Yes, although some of it has dealt with
marketing in
2 other areas, my primary focus has been children
and their
3 perceptions of advertising.
4 Q. I'll let you pour your water without

disturbing you?

5 A. Okay, thank you.

6 Q. Have you, and again without going through
a list,
7 have you been published in peer review marketing
journals?

8 A. Yes, I have.

9 Q. And in what kind of journals has your work
appeared?

10 A. My work's appeared in the Journal of
Marketing, in
11 the Journal of Advertising, the Journal of
Advertising

12 Research, the Journal of Direct Marketing, the
Journal of
13 Broadcasting and Communication, the Child Study
Journal,

14 the Business Journal.

15 Q. Okay. And let me ask you this, are you a
member of
16 any professional organizations in the field of
marketing?

17 A. Sure, yes, I am.

18 Q. What are they?

19 A. I belong to the American Marketing
association, to

20 the Society for Consumer Psychology, the
American Academy

21 of Advertising, the Association for Consumer
Research.

22 Q. And on occasion, Professor Henke, do you
act as a
23 peer reviewer for articles that are published in
peer

24 review journals?

25 A. Yes, I do.

3106

1 Q. Professor Henke, your opinions today are
going to be
2 based on your experience, your work, your
knowledge of

3 marketing, is that correct?

4 A. Yes.

5 Q. In preparing your opinions today, to
present to the
6 jury, did you undertake to review the historical
marketing

7 documents of the defendants in this case?

8 A. No, I did not.

9 Q. Why not?

10 A. Well, my focus here today is really the
effects of
11 advertising and promotion, not the intent,
that's a

12 separate area, and I'm really focusing on the
issues and
13 the social science literature.

14 Q. Okay. Now, based on your training and
experience, do
15 you have an opinion to a reasonable degree of
scientific

16 certainty in your field of specialization

regarding whether

17 or not cigarette advertising and promotion

causes the

18 initiation of smoking among young people?

19 A. Yes, I do.

20 Q. And what is that opinion?

21 A. Tobacco advertising and promotion does not

cause kids

22 to start smoking.

23 The research shows us that there are

a host of

24 other factors that affect that decision,

including

25 augmentive development level and interaction

with families

3107

1 and interaction with friends and interactions

with

2 siblings, and in fact a bulk of the research

shows us it

3 is the influence of parents and peers that

really impact

4 the decision whether or not to smoke not

advertising.

5 And I know that seems

counter-intuitive to a

6 degree, because as parents we tend to think

that our

7 children are vulnerable to advertising that

advertising is

8 very powerful, but in fact it is not powerful

enough to

9 overwhelm the influence that parents have on

young

10 children and that peers have on older children.

11 Q. Okay. Now, what types of data or evidence

do you

12 want to discuss with the jury today regarding

that opinion?

13 A. Well, I have several different types of

data that

14 support that opinion, I would say the primary

source is

15 going to be the academic literature, studies

from the

16 social sciences.

17 Q. Okay. And I put up a chart here, does

that

18 illustrate the kinds of things you want to

review with the

19 jury?

20 A. That's good.

21 Q. Let's start with academic literature. Was

that a

22 category of information?

23 A. By academic literature, I'm talking about

articles

24 that are published by researchers in peer review

journals

25 that will come from all different disciplines

supporting my

3108

this
with
that there
would be
to skip
about is
considered
the
the reasons
referring to
comparative
advertising out
If the
pervasive,
different from
spent on
market?
compare it to

1 opinion, that have been done for decades. And
2 research is done by independent researchers in
3 universities. It's also done by researchers
4 government agencies. And I think you will see
5 is a convergence of findings on that.
6 Q. Now, the simple way to go about this chart
7 to go just clockwise one by one, but I'm going
8 around.
9 The next thing I want to talk to you
10 polls and surveys. What kind of information is
11 in polls and surveys?
12 A. Like the Harris polls, some have conducted
13 surveys with adults, adolescents, to determine
14 for smoking, starting to smoke. And I'll be
15 some of those.
16 Q. And at the bottom, where you talk about
17 advertising analysis, what is that?
18 A. Well, there is where I pull tobacco
19 and compare it to other types of advertising.
20 suggestion is that this is very powerful and
21 let's take a look at it.
22 What are the images? Are they
23 images in other ads? What amounts of money are
24 this? Is it overwhelming in denominating the
25 Let's take a look at tobacco advertising and
compare it to

3109

it is
referring to
primarily to
looking at
advertising;
advertising
what happens
in those countries?

1 advertising for other products, and that's what
2 comparison will be.
3 Q. Real world experience, what are you
4 there?
5 A. By real world experience I'm referring
6 information in kind of field experiments,
7 countries where there has been no cigarette
8 what happens there? Looking at countries where
9 has been banned or restricted for cigarettes,
10 in those countries?

11 Q. And then the last category I want to cover
is
12 interviews with smokers, what does that
describe?
13 A. That is a supplemental piece here where I
have looked
14 at depositions of the trustees in the case, and
to
15 determine what they say about why they started
smoking.
16 And it's very interesting how consistent it is
with
17 literature.
18 Q. Why don't we, why don't we start with the
academic
19 literature. I want to talk to you in some
detail later
20 this morning about your own research, but let's
talk about
21 first the research of others.
22 Have you reviewed the literature in
the area of
23 cigarette advertising and it's affect on
initiation?
24 A. Yes, I have.
25 Q. And what have you found?

3110

1 A. I have found that for many years people
from several
2 different disciplines and government agencies
have looked
3 at this issue, and the findings are consistent
in that peer
4 influence and parent influence is cited time
after time as
5 the reasons for initiation of smoking.
6 Q. And have you prepared a chart that lists
some of the
7 research that you are relying on?
8 A. Yes, I have. Some of it. And I would
emphasize this
9 is only some of it, we would have a lot more if
I were to
10 try to produce all of it, but what I've tried to
do here is
11 to get a good sampling of the different kinds of
12 disciplines that are represented in this work,
the
13 government agencies that are represented and the
timetable
14 to some degree that we are talking about that
this work's
15 taking place.
16 Q. And I am displaying for the record,
Demonstrative
17 Exhibit 652.
18 Is that the exhibit you prepared,
Dr. Henke?
19 A. Yes, it is.
20 Q. Is this an exhaustive listing of research?
21 A. Absolutely not.
22 Q. Do you want to walk us through it briefly,

what you

- 23 point out and what the holdings are?
24 A. Yes, I can do that.
25 Q. If you can read it?

3111

1 MR. ROWE: Your Honor, may we
approach the
2 bench?
3 THE COURT: Yes, you may.
4 MR. ROWE: I object to using other
articles to
5 support her opinion, also not normally
admissible to an
6 expert's opinion. She can testify this is what
the
7 literature is with you, but this exhibit goes
to other
8 articles of journals. That seems to me that's
not proper.
9 MR. LERMAN: Your Honor, this is an
10 illustration of the material she is relying on
for her
11 expert opinions. These articles themselves are
not being
12 offered, it's no different than what plaintiffs
did during
13 the course of their presentations of their
experts.
14 THE COURT: At this point there is
an -- I
15 mean, the evidence rule 803 says -- 18
generally talks
16 about the right to use it on cross but not on
direct.
17 MR. LERMAN: Your Honor, this is
relevant to
18 explain the basis of his opinions but again we
are not.
19 THE COURT: It is relevant, but the
objection
20 is it is hearsay.
21 MR. LERMAN: Again, we are not
offering these
22 articles into evidence, what we are doing is
allowing her
23 to review the kinds of literature that she has
seen and
24 discuss them with the jury. It's a convenient
way to do
25 that on a demonstrative exhibit.

3112

1 THE COURT: Well, it's still
hearsay. I know
2 it's convenient, but it's got, we have had
quite a bit of
3 it frankly.
4 MR. LERMAN: Again, your Honor.
5 THE COURT: It would -- are you sure
you want
6 to make the objection, because it is going to
make a

7 consistent objection throughout the trial to
every expert
8 you call and they call.
9 MR. ROWE: I feel like that, if we
can do it on
10 cross examination.
11 MR. LERMAN: Your Honor, they have
done it on
12 direct.
13 THE COURT: I know they have, I
thought there
14 would be an objection to it, I thought there
would be an
15 agreement between the parties not to object.
16 MR. LERMAN: I haven't seen a
prejudice to him
17 to go through this at all. I don't know
counsel has
18 stated a prejudice to it at all. It is not
being offered
19 as evidence.
20 THE COURT: If you want to back
down, if not
21 I'll sustain. I think it is hearsay. It is
able to be
22 used on cross, but not so much on direct. So,
we'll wait,
23 you may be able to get into it on redirect, if
they, if
24 they start to cross on lack of support in the
literature,
25 I may revisit this.

3113

1 MR. ROWE: We'll do that.
2 THE COURT: Well, then you may open
the gate.
3 Are you representing that you are going to go
into it?
4 MR. ROWE: I will represent that.
5 THE COURT: Well, then I'm going to
allow it.
6 MR. ROWE: Okay.
7 MR. LERMAN: Thank you.
8 THE COURT: Go ahead and ask another
question.
9 MR. LERMAN: Thank you, your Honor.
10 Q. Professor Henke, why don't you see if you
can quickly
11 take us through that chart and the kinds of
studies that
12 are listed there?
13 A. All right. We'll start at the top, left
hand side,
14 in the Journal of Adolescent Health, it's a 1995
study, and
15 this study is by Wang, who has been doing an
analysis of
16 teenage attitudes and practices surveys, which
were
17 national interviews with 12 to 18 years olds.
18 In this particular cross sectional
study, Wang

19 identifies peer influence --
20 THE COURT: Just what they generally
found
21 don't go through every study.
22 THE WITNESS: All right. Peer
influence
23 appeared to be the most significant and
consistent
24 predictor of adolescent smoking across all ages
of 14 to
25 18 years.

3114

1 There is no objective and
substantial evidence
2 that tobacco advertising leads to juvenile
smoking
3 initiation.
4 Secondly, there is no objective and
substantial
5 evidence that tobacco advertising leads to
increased
6 tobacco consumption.
7 From an international study, who
studied the
8 strongest predictors of smoking used are,
significant
9 other smoking behaviors and other attitudes to
smoking.
10 American Journal of Public Health in '87, the
most
11 pervasive predictor of experimentation with
cigarettes was
12 whether or not a best friend or several friends
smoked.
13 The International Journal of
Advertising,
14 McDonald Funds, there is no evidence in any of
the studies
15 to suggest that if advertising were banned it
would make
16 the least difference in the propensity of
children to
17 smoke.
18 From the U.S. Department of Health
and
19 Education and Welfare, 1972. The one factor
that has by
20 far the most influence on a child's decision to
smoke is
21 the smoking behavior of those around him.
22 The Children's Research Unit.
Altogether, the
23 factors accounting for smoking initiation are
highly
24 consistent internationally, and were obtained
to be
25 largely unrelated to the presence or absence of

3115

1 advertising and to its level of control.
2 From adolescents, peer groups are
crucially

3 important in the initiation of smoking among
young
4 adolescents.
5 THE COURT: You are asking her to
just read. I
6 thought you were going to ask her for a
summary.
7 MR. LERMAN: We'll move on.
8 THE WITNESS: It's consistent from
several
9 different sources, including the Federal Trade
Commission,
10 governmental sources, and independent
researchers as well.
11 Q. As director the Federal Trade Commission
are you
12 familiar with something called the Mulholland
report?
13 A. Yes.
14 Q. And what was the Mulholland report?
15 A. The Mulholland report was introduced in
1989. It was
16 a study of the relationship between tobacco
advertising and
17 consumption.
18 Q. And the FTC is the federal agency that is
in charge
19 of what?
20 A. It's a federal agency that is in charge of
regulation
21 of advertising.
22 Q. Do they have jurisdiction over cigarette
advertising?
23 A. Yes.
24 Q. Let me show you demonstrative -- is this
-- this is
25 Exhibit IWP 0007061. Is this the Mulholland
record?

3116
1 A. Yes, it is a report on the effective
advertising.
2 Q. And is this part of the conclusions of the
Mulholland
3 report?
4 A. Yes.
5 Q. And can you read what that highlighted
sentence says?
6 A. The lack of a significant effect is
consistent with
7 the view.
8 THE COURT: Let me just try to just
read it,
9 you are not, just read the thing, you don't --
we are not
10 on something where we are asking for your
emphasis of
11 what's the statement. Just read the thing.
12 A. All right. The lack of a significant
effect is
13 consistent with the view that advertising in the
cigarette
14 industry serves mainly to reallocate demand

among brands,
15 rather than to increase aggregate demand.
16 Q. Thank you, have you seen other studies,
particularly
17 a study by Dr. John Pierce in February, 1998
that suggests
18 that advertising in fact controls or affects the
demand for
19 cigarettes or smoking initiation?
20 A. I have seen the '98 study, yes.
21 Q. And I want to talk to you in detail about
that study
22 later, but just for now, do you agree or
disagree with the
23 holdings of that study?
24 A. I disagree with that study's findings.
25 MR. ROWE: Lack of foundation. This
witness is

3117
1 not an expert to offer an opinion on an
epidemiological
2 study given by a medical doctor.
3 THE COURT: Well, let me ask counsel
to
4 approach.
5 We are not making a Daubert, you are
not making
6 some Daubert argument.
7 MR. ROWE: This witness can offer
opinions in
8 the area of marketing.
9 THE COURT: Don't they cross over?
10 MR. ROWE: Marketing and
epidemiology.
11 THE COURT: I think it goes more to
weight.
12 I'll allow her to answer, but I think you are
right in
13 terms of I don't think, at least as to
foundation, she's
14 got the qualifications to testify as to the
epidemiology.
15 She can say that her opinions differ
based on
16 conclusions, but I don't know that she's
qualified at this
17 point to criticize the methodology that Pierce
used.
18 MR. LERMAN: I appreciate the way
it's been
19 tied up. That's not apparent, but I will lay
the
20 foundation on that issue.
21 THE COURT: Okay.
22 BY MR. LERMAN:
23 Q. And Professor Henke, are you familiar with
a study by
24 John Pierce?
25 THE COURT: I think she just
testified that she

3118

1 is.
2 MR. LERMAN: Different study, your
Honor.
3 THE COURT: Okay.
4 BY MR. LERMAN:
5 Q. Are you familiar with a study by John
Pierce
6 published in June of 1998 regarding the effect
of parental
7 influences on smoking initiation?
8 A. Yes, I am.
9 Q. And what was the conclusion of that
particular study?
10 A. Dr. Pierce and his colleagues found that
parental
11 influence was a very important factor, in fact
the single
12 most factor promoting initiation.
13 Q. And for the record, I'm displaying
Demonstrative
14 Exhibit 6575. Can you read the highlighted
portion there?
15 A. The single most important factor promoting
the
16 initiation and excalation of substance use in
adolescents a
17 parents, older siblings and friends engaged in
the
18 behavior. Exposure to smokers in the social
network is a
19 strong and consistent predictor of smoking
initiation.
20 Q. Professor Henke, and I want to go back to
that
21 overview slide and move us to talking about
polls and
22 surveys. What polls and surveys have you
reviewed in
23 preparation for your testimony today?
24 A. Well, I have a few that have been focusing
25 specifically on initiation of smoking and what
factors

3119
1 people cite as the reasons for starting to
smoke. I have
2 some Gallup polls, specifically.
3 Q. And Gallup polls, Gallup again is a
political
4 organization, they are famous for doing
political polling?
5 A. They are a polling organization and they
have done
6 quite a bit of political polling.
7 Q. What Gallup polls are you discussing?
8 A. I have a poll, a national survey of adults
from 1993.
9 Q. I've now put up a Demonstrative Exhibit
6505. Does
10 this illustrate the results of the 1993 Gallup
poll?
11 A. Yes.
12 Q. Can you describe what that poll was and

what the
13 results were?
14 A. In this poll adults were asked in an open
fashion to
15 identify what factors motivated their decision
to start
16 smoking, and by far, peer influence was
identified as the
17 leading factor in smoking initiation.
18 Family influence comes up second,
and as you
19 can see advertising is simply not there.
20 Q. Okay. Now, when you say open ended
fashion, what
21 does that mean in terms of taking a poll?
22 A. An open ended question will allow a
respondent to
23 name anything and not limit the respondent to a
list,
24 choices from a list of things; they can identify
anything
25 and coders will categorize those responses
appropriately.

3120
1 Q. Now, this is a poll of adult smokers
asking them to
2 talk about what caused them to begin smoking.
Is there a
3 poll of adolescents smokers?
4 A. Yes. In fact, you might ask, can adults
really
5 remember that far back if they have started
smoking not
6 yesterday. So another poll I have is a poll of
adolescents
7 asking the same question in the same fashion.
8 Q. All right. And let me, let me bring that
up. This
9 is Demonstrative Exhibit 6504. Are those the
results of
10 the poll for adolescents?
11 A. Yes, they are.
12 Q. And was this an open ended poll?
13 A. That was another open ended question.
14 Q. And what do the results show? The results
are
15 showing that friends were identified by far,
most often.
16 And that family influences are identified second
most
17 often. And advertising just doesn't show up.
18 And how do the results of the '93
poll of the
19 adults and '94 poll of adolescents compare?
20 A. They are very consistent with each other.
21 Q. Now, now if there is an open ended poll, I
guess the
22 logical question is, is there such a thing as a
close ended
23 poll?
24 A. Yes.
25 Q. What is a close ended poll?

3121

choice
a number
people had
close ended
for them to
offered close
the result
by most of
second, family
response, even
options.
Actually fewer
poll, the
the '91
asked to
smoking?

1 A. A close ended poll would be a multiple
2 question, give a list, ask people to choose from
3 of factors on the list; and therefore, if these
4 sort of forgotten to mention advertising in a
5 question, the advertising option would be there
6 choose.
7 Q. And did you look at Gallup polls that
8 ended questions on this subject?
9 A. Yes.
10 Q. Let me put Demonstrative 6606 up. Is this
11 of a 1991 close ended Gallup poll?
12 A. Yes, it is.
13 Q. And what are the results here?
14 A. Peer pressure was identified as the factor
15 the people in the poll. Some other reasons,
16 member follows that, and magazine and television
17 advertising received one percent of the
18 though it was listed as part of the response
19 Q. And what about cigarette sampling?
20 A. That came up fewer than one percent.
21 than one half of one percent.
22 Q. Now, in these three polls, the '94 Gallup
23 '93 Gallup poll, and this one we are looking at,
24 Gallup poll, is it fair to say that people were
25 identify one single factor that described their

3122

people to
is one of
able to do
example of
reflected in this
actually

1 A. Yes.
2 Q. Are their polls that give ranks and allow
3 identify more than one factor?
4 A. Yes. In fact. If cigarette advertising
5 the factors that people mentioned, they would be
6 that in another type of poll, yes, I have an
7 that.
8 Q. Let me put that up. Is that poll
9 Demonstrative 6636 that I'm displaying now?
10 A. Yes.
11 Q. All right. Can you -- who did this poll?
12 A. This is a study by Zinser, and it's

13 considered more of an academic study than a
commercial
14 poll. And what Zinser did was give each of his
respondents
15 a hundred points, and he gave them five response
options,
16 and he had them allocate their hundred points
across those
17 5 response options, according to the weight each
one of
18 those influenced in their decision.

19 So by random chance, you would
expect to see
20 that every one of these options would get 20
percent of
21 the 100 points, 20 points. What, in fact,
happens is
22 percent are getting a disproportionate amount
of points,
23 again consistent with the other polls. Peers
are the
24 strongest factor, as identified here, and even
in this
25 situation where you would expect everything to
be given 20

3123

1 points if all things are equal, advertising
comes in with
2 an average weight of 3.4.
3 Q. Now, let me move us back to our overview
again and
4 move on to the subject of your comparative
advertising
5 analysis.

6 What did you do in this respect?
7 A. In the comparative advertising analysis,
I've looked
8 at cigarette advertising and compared it to
advertising in
9 other industries. And I've looked at the
expenditure to
10 see if it's out of line with what is spent in
other
11 industries. I've looked at the content, looked
at the
12 imagery to see if it's unique in some way that
would make
13 it especially powerful. So I have some
overheads for
14 those.

15 Q. And have you prepared some analyses
comparing budgets
16 of cigarette advertising to other advertising
budgets for
17 other industries?

18 A. Yes, I have.

19 Q. Let me put up demonstrative 6628. What
companies
20 does this show?

21 A. This simply shows that cigarette ads
spending is not
22 dominating advertising spending in the United

States, it's
 23 a very small proportion of the total amount of
 advertising
 24 dollars spent in the United States.
 25 Q. And in this comparison, are you talking
 about

3124

1 promotion and advertising or just advertising?
 2 A. This is just advertising.
 3 Q. So this would be billboard and magazine
 type
 4 advertising?
 5 A. That's right.
 6 Q. And did you take a look at comparisons
 across
 7 industries of advertising expenditures?
 8 A. Yes, I did.
 9 Q. All right. Let me put up our next
 demonstrative
 10 which, for the record, is 6534. What does this
 show?
 11 A. This is the amount of money that's spent
 by different
 12 industries on advertising. You can see up at
 the top is
 13 the automotive industry coming in at 11 and a
 half billion
 14 dollars, cigarettes come in closer to the bottom
 at 600
 15 million dollars.
 16 Q. And what's the significance of this?
 17 A. This is simply -- cigarette advertising is
 not out of
 18 line with other industries. In fact, they are
 spending
 19 less than many other industries that have
 material
 20 products.
 21 Q. What about when you put in some of their
 promotional
 22 expenditures, did you do an analysis of
 advertising and
 23 promotional expenditures?
 24 A. Yes, I did.
 25 Q. Let me put up the 6620. What does this
 show?

3125

1 A. This is the amount of ad dollars that are
 spent
 2 relative to the sales in various industries.
 And these ad
 3 dollars, by the way, include consumer promotion,
 so it's
 4 consumer advertising and promotion dollars here
 spent by
 5 various industries as a proportion of their
 total sales.
 6 Cigarettes are in line with other
 industries,
 7 in terms of the amount of their sales dollars
 spent on

8 advertising it's not unique in any way.
9 Q. Professor Henke, are cigarettes advertised
on radio
10 or television?
11 A. No, they are not.
12 Q. Is there any significance to that in your
opinion
13 regarding the effect of advertising on
adolescents?
14 A. Yes. In fact, the fact that
advertisements for
15 cigarettes have not been on radio and TV since
1971
16 indicates that a lot of adolescents and children
have not
17 been exposed to advertising. Their primary
media
18 consumption is from television and radio, so
it's simply
19 not there.
20 Q. Have you done any analysis of the impact
of billboard
21 advertising?
22 A. Yes, I have.
23 Q. What have you done in that regard?
24 A. Well, you find that billboard advertising
is directed
25 toward commuters, traveling adults, and you
don't actually

3126
under 18
billboard
children.
What do you
important
are going
your first
this magazine?
is a high
medium's
you place
have data on
that
that data,
1 even find information about the number of people
2 in a billboard audience when you are buying
3 space; it's simply not considered a medium for
4 Q. Let's stop on that point for a second.
5 mean you don't find that information?
6 A. That's not something that's considered
7 enough to gather in systematic fashion. If you
8 to advertise in a medium, say magazine, one of
9 questions is going to be who's going to read
10 Who's going to see my ad? And what you look for
11 percentage of your target market in that
12 readership, in that magazine's readership before
13 an ad. Placing ads on billboards, you don't
14 how many children or how many adolescents are in
15 viewing market, it's simply not collected.
16 Q. Who, and who is it that is not collecting
17 I guess that's my specific question?
18 A. Ad agencies, media agencies.

for a 19 Q. So, in other words, if you are shopping
many under 18 20 billboard and looking for information on how
21 year olds see it, the information isn't there?
22 A. That's right.
23 Q. And have you put together an analysis of
the kinds of 24 ads that run on billboards?
25 A. I have a graphic that demonstrates the
findings done

3127
kind of 1 on a study in Michigan that is typical of the
of it is 2 billboard advertising that you see. Over half
travelers are 3 going to be related to travel and things that
4 looking for, hotels in the next town,
restaurants, those 5 kinds of things.
6 Second highest area is going to be
non-travel 7 related retailing; banks, car dealerships,
things of that 8 nature. Tobacco advertising comes in at around
five 9 percent of billboard advertising.
10 Q. Okay. And just for the record, you are
looking at 11 Demonstrative Exhibit 6622. And what does this
tell you in 12 terms of your analysis on the effect of tobacco
13 advertising?
14 A. That tobacco advertising doesn't dominate
billboard 15 advertising, by any means, by any stretch.
16 Q. Now, if cigarette advertising was
responsible for the 17 initiation by kids of smoking, what would you
expect to see 18 looking at long term trends of consumption and
advertising 19 spent?
20 A. Well, if advertising were causing
consumption I would 21 expect to see as you spend more on advertising,
that 22 consumption increases.
23 Q. All right. And have you taken a look at
some long 24 term trends to see if you could find that
correlation? 25 A. Yes, I have.

3128
1 Q. What did you find?
2 A. It's not related.
3 Q. All right. Let me show you Demonstrative
6509. What 4 is that line on that chart?
5 A. Per capita cigarette sales from 1970 to

1995.

6 Q. And what does that generally show?
7 A. There is a decrease in consumption.
8 Q. Okay. What is that blue line that's just
appeared on
9 the chart?
10 A. The blue line is the amount of money spent
on
11 advertising and promotion of cigarettes from
1970 to 1995.
12 Q. And what does that tell you, looking at
those two
13 lines?
14 A. Those are, you are almost seeing an
inverse
15 relationship. As spending on advertising and
promotion
16 increases, cigarette consumption decreases.
17 Q. And there is now a red line that appears
at the
18 bottom of that chart. What does that line tell
you?
19 A. There is the total in advertising dollars
spent in
20 tobacco advertising, it's pretty flat, and that
doesn't
21 appear to be related to consumption either.
22 Q. Have you also looked at the rate of high
school
23 seniors smoking initiation and that trend versus
spending
24 on advertising and promotion?
25 A. Yes, I have.

3129

Demonstrative
1 Q. Let me see if I can call up slide
2 Exhibit 6510. What is that line that appears on
the chart?
3 A. Percentage of high school seniors who
smoked in the
4 past 30 days from 1975 to 1995.
5 Q. And then I'll put this blue line back on
the chart
6 again. What is that blue line?
7 A. That, again, is the one we have seen
before, it's the
8 spending for advertising and promotion of
tobacco.
9 Q. And looking at those two lines, do you see
any
10 correlation between the two of them?
11 A. No, I would expect that if advertising and
promotion
12 were affecting consumption and causing
consumption then
13 there would be an increase in consumption with
an increase
14 in advertising promotion, and there is not.
15 Q. Now, the jury has heard some testimony
regarding the
16 use of certain imagery in cigarette advertising.
Professor

17 Henke, in particular, looking at the Joe Camel
campaign,
18 have you done work related to the Joe Camel
advertising
19 campaign?
20 A. Yes, I have.
21 Q. What sort of work have you done?
22 A. My study?
23 Q. Your study?
24 A. In 1995 was published in the Journal of
Advertising
25 Research. My study dealt with children between
the ages of

3130

1 3 and 8. And my questions were, what kind of
awareness do
2 these children have with regard to not just Joe
Camel, but
3 other brand logos?
4 And secondly, how does that
translate, if at
5 all, into attitudes toward smoking?
6 Q. And what was the, what were you trying to
establish
7 with this study? How does this relate to the
issue of
8 cigarette advertising and initiation?
9 A. Well, there had been suggestions that
children who
10 were very aware of advertising, who had high
recognition of
11 the cigarette advertising and the brand logos,
especially
12 Joe Camel, were therefore more at risk for using
the
13 product. And that's really counter to thinking.

In
14 consumer behavior there are a lot of steps
between
15 awareness and product use, and I was simply
looking at
16 these characteristics among young children to
determine
17 whether there was a link or there was no link.
18 Q. Okay.
19 Did these studies involve the use of
the
20 non-verbal technique that you had developed
over the last
21 15 to 20 years?
22 A. That's right.
23 Q. Describe what it is that you did exactly
in your
24 studies?
25 A. Well, I had a game board that portrayed, I
think it

3131

1 was, about 22 different categories of products.
There were
2 pictures of products without brand names on
them. So one

3 square, for example, would be a hamburger,
another square
4 would be a gas pump, another was a cigarette.
And after
5 determining that the child understood what each
picture
6 represented, we then took a stack of logo photos
and had
7 the child match the logo to the appropriate
product
8 category. So that Ronald McDonald, which was
one of the
9 test items, one of the McDonald arches was a
test item,
10 would be placed on a hamburger category. That's
a way of
11 learning about awareness with young children
that a
12 particular brand name is associated with a
certain product
13 category. That card would be removed and the
next card
14 would come up, so that they matched those brand
logos to
15 the appropriate square on the game board.
16 Q. And did you prepare a chart that sort of
illustrates
17 your findings with respect to recognition of
logos?
18 A. Yes, I do have some.
19 Q. Let me put that up. And that is
Demonstrative 6603,
20 what's shown here on 6603?
21 A. This is a percentage of recognition of
those brand
22 symbols. For all the children who were studied
from 3 to
23 8, you can see that McDonald's is the best
recognized.
24 They are most aware of McDonald's as a hamburger
25 representative. And Joe Camel comes in
somewhere in the

3132

1 middle between Chevrolet and Folger's coffee,
some other
2 adult products.
3 And, in fact, children's recognition
of many
4 brand logos is very high, they are very aware
of the world
5 around them.
6 Q. Have you talked to GE about what they are
doing
7 wrong, by the way?
8 A. No.
9 Q. What did you do with this information?
Now you have
10 got some recognition data of young children,
what did you
11 do with this?
12 A. Well, I did look at changes over age with
13 recognition, and the older children closer to 8

years old
14 did have a little higher recognition than the
younger ones.
15 And I then started to ask about some of those
next phases
16 in the decision making process; how do you feel
about
17 certain product categories?
18 I took a subset of five or six
product
19 categories, one of them was Joe Camel and
cigarettes, and
20 asked them questions like how do you feel about
this
21 product? Is it good for you or bad for you?
Who's it
22 for? Is it for adults or is it for children?
And got
23 some assessment of something beyond
recognition.
24 So here they recognized the brand;
the question
25 is, so what? What do they feel about it? What
do they

3133

1 feel about the product category?
2 Q. And does brand recognition translate in
marketing,
3 does brand recognition translate into purchasing
decisions
4 or liking a product?
5 A. No, it doesn't translate into that. You
might say
6 that in order to purchase a product you need to
have met
7 certain conditions to recognize the brand name
and know it,
8 but it is certainly not a translation. There
are many
9 steps in-between that awareness and a decision
to purchase
10 or to use the product.
11 Q. Stepping back a second and talking to the
adults in
12 the courtroom, what sort of examples do you have
of people
13 that, or advertising promotions that have
generated high
14 recognition but have been failures in terms of
translating
15 to that into purchasing decisions?
16 A. There have been a lot of examples of
failures. The
17 "got milk" campaign is very popular, people
really enjoy
18 seeing the celebrities with the mustaches, milk
mustaches,
19 and most people are aware of that campaign and
even like
20 it, but it hasn't done anything to improve milk
21 consumption. It is not touching consumption.
22 Where is the beef? Clara Pell, was

funny,
23 people enjoyed seeing that, it didn't help
Wendy's. And
24 these are situations where people actually like
the
25 advertising, they have a positive attitude
toward the ads,

3134
1 it doesn't translate into consumption.
2 There is also another level where
people are
3 aware, say, as in the recognition here, very
aware of the
4 advertising. They have seen the advertising,
but they
5 still won't buy the product. And I'll take the
classic,
6 the Edsel example was an automobile that was
advertised
7 and advertised and advertised, and thought the
car was
8 ugly and they didn't want to have anything to
do with the
9 product, so there are a lot of examples.
10 Q. Now, did you take, did you prepare some
summaries of
11 the attitudes that the kids who were in your
survey had
12 about cigarettes?
13 A. Yes.
14 Q. Okay. And let me put up now what's marked
as
15 Demonstrative 6513. What does this show?
16 A. This shows that there was pretty much
consistency
17 among the kids in my study. They did not like
cigarettes
18 and asked if they liked or disliked that
product,
19 cigarettes. Almost all of them said no, they
did not like
20 cigarettes.
21 Q. All right. Let me put up 6512,
Demonstrative 6512.
22 What does that show?
23 A. Asked if cigarettes are good for you or
bad for you,
24 almost all the all of the children said bad for
you.
25 Q. Again 6511?

3135
1 A. This is an interesting one. Going on with
the
2 concept of market segmentation, I asked the
children who's
3 this product for, is it for children or is it
for adults?
4 And nobody said it was for children. 70 percent
said it
5 was for adults, but the interesting thing is,
even these

6 kids 3 to 8 were volunteering information this
is for
7 nobody. And it wasn't one of the response
options, but
8 they were volunteering this information that
this product
9 was for nobody.
10 Q. What does your study show? You are
dealing with 3
11 and a half to 8 year olds, what does that show
in terms of
12 the decisions that 12 or 14 year olds are going
to be
13 making about smoking?
14 A. Absolutely nothing. This is a study of 3
to 8 year
15 olds in a southern town in Maine and what their
attitudes
16 were and their recognition was at this time.
And whether
17 these kids will grow up and smoke is another
issue.
18 Whether I was getting a socially
desirable
19 response, which is, I know what the right
answer is, my
20 teachers have told me, my parents have told me
cigarettes
21 are bad, I might as well tell you that too,
cigarettes are
22 bad.
23 I may have been getting a socially
desirable
24 response, that's true, but the point here is
that they
25 have information, they understand information
about the

3136
1 product category and they are able to convey
that
2 information. And what they are saying about
the product
3 is not related to what they are telling me,
about
4 recognition of the ad and the brand logo, so
limited in
5 those ways, and most studies have some
limitations, but
6 this is a delineation of the separation of logo
7 recognition, and attitude toward a product
category.
8 Q. Now, your study isn't going to predict if
I'm hearing
9 you correctly, which of these kids is going to
go on to
10 smoke?
11 A. That's right.
12 Q. How does the information that you learn
from this
13 study help you in addressing the issue of the
role of
14 advertising for those older kids, the 12, 13, 14

year olds?

15 A. Well, if some of these kids do go on to
smoke, they
16 have seen the advertising for many years, they
know the
17 advertising now at this young age, if they begin
to smoke
18 later in their adolescent years, I'm saying the
advertising

19 is a constant, it has been there.
20 What else has changed? A lot of
things have
21 changed in the meantime. Developmental level
will change,
22 kids change as they age, peer influence becomes
much more
23 important, the social affiliation is much more
important.
24 Those kinds of things are what will
be changing
25 by the time, if there is a time, that any of
these

3137

1 children begin to smoke.
2 Q. And --
3 THE COURT: Is this, are you going
to a
4 different area, because.
5 MR. LERMAN: I've got one more
question, judge,
6 and then I'm going to move to a different area.
7 THE COURT: Why don't you go ahead
and ask that
8 question.

9 BY MR. LERMAN:
10 Q. And Professor, the jury has seen this
before and it
11 has been addressed, is there anything wrong with
R.J.
12 Reynolds choosing a cartoon character to market
an adult

13 product?
14 A. No.
15 Q. Why would a company use a cartoon
character to market
16 an adult product?
17 A. There are a lot of reasons that you would
use an
18 adult character, one of them is adult -- I mean
a cartoon
19 character, adults like cartoon characters,
cartoon
20 characters are cheaper than many of the
celebrities used

21 for testimonials, cartoon characters will not be
involved
22 in scandals, there are a lot of reasons to use
cartoon
23 characters.
24 Q. Showing you Demonstrative 6714. Is that
the
25 Demonstrative of cartoon charters used to

demonstrate

3138

1 products?
2 A. Yes, it is.
3 THE COURT: We are going to take a
recess until
4 about 28 minutes 'til, be back in the jury
room.
5 (Brief recess.)
6 THE COURT: If you will, if the jury
will
7 please be seated, and I'll ask Mr. Lerman to
continue
8 direct examination.
9 MR. LERMAN: Thank you, your Honor.
10 Q. Professor Henke, going back to the screen
that we had
11 started with, we talked about academic
literature, polls,
12 and surveys, comparisons of advertising
analysis. And now
13 I want to move on what you call real world
experience.
14 What is that that you are referring to?
15 A. Well, by real world experience, I'm
referring to some
16 places where cigarette advertising has never
occurred or
17 where cigarette advertising has been banned or
restricted.
18 And we looked at consumption in the those
places, and first
19 of all, identified where cigarette advertising
has
20 historically never appeared.
21 Q. What sort of countries are those?
22 A. Russia, China, until recently there is no
cigarette
23 advertising and yet there are very high rates of
smoking.
24 And studies that are being done now in China,
for example,
25 are looking for the influences of smoking, and
they are

3139

1 citing social influences as well.
2 Q. And how about those countries in which
there was
3 advertising and then advertising had been
banned?
4 A. There are many places where some
advertising
5 restrictions or banns have gone into place. And
the
6 evidence on the results of that banning of
advertising
7 don't support the suggestion that advertising
causes
8 consumption of cigarettes.
9 In some places, advertising -- in
some places

other 10 consumption goes up after a ban is enforced; in
advertising 11 places, consumption remains level; sometimes
clear. I mean 12 goes down. And when it goes down it's not
not clear 13 consumption goes down, and when it does it's
things happen 14 that it is because of advertising. Other
programs 15 such as taxes or price increases or educational
so it is 16 going into effect at the same time of the ban,
17 not supportive of that suggestion.

18 Q. And in terms of studies on advertising
bans, are you 19 aware of a New Zealand study that took a look at
20 advertising bans?

21 A. Yes, I am.

22 Q. And are you aware of a chart that seems to
indicate 23 as the level of advertising regulation increases
the amount 24 of smoking goes down, are you aware of that kind
of chart? 25

A. I've seen a chart that plots the amount of

3140
consumption, 1 advertising restriction against the amount of
2 yes.
to that 3 Q. What's your reaction, your expert reaction
4 kind of analysis?

5 A. Well, in this particular chart, that I am
referring 6 to, there appears from the data points to be no
correlation 7 between the level of restriction of advertising
and the 8 amount of consumption.

9 Q. All right. And is that consistent with
your review 10 of what's actually happened in these countries?
11 A. Yes, consumption is all over the chart,
basically.

12 Q. Now, moving to the last point that you
wanted to talk 13 about, called that interviews with smokers?

14 A. Right.

15 Q. What is that?

16 A. That's simply a supplement to what I've
mentioned 17 before in the academic literature. This is not
a 18 scientific study that I'm referring to in this
section, but 19 I had a random sample of depositions from the
trustees in 20 the case, and I noticed that some of them never
smoked, 21 others started smoking young ages, some started

smoking at
22 older ages. And I requested the depositions of
trustees
23 who smoked, who could identify why they started
smoking.
24 And in those depositions I find that the
responses are very
25 consistent with the literature, only --

3141
1 Q. Let me just stop you. How many
depositions or
2 excerpts from depositions did you review of
trustees who
3 had smoked and were questioned about why they
started
4 smoking?
5 A. 49; 49, 50.
6 Q. And in reviewing those 49, what did you
find with
7 respect to the role of advertising?
8 A. Two people mentioned it and they mentioned
it in
9 conjunction with peer influence and other
factors.
10 Q. And the other 47 who responded to
questions about why
11 they started smoking, did they mention
advertising?
12 A. No, they didn't, they mentioned peer
influence and
13 other factors but not advertising. So it was
very
14 consistent with what the literature shows taking
place.
15 Q. Well, we have covered now your opinion on
whether or
16 not the cigarette advertising causes initiation
of smoking.
17 If it doesn't cause initiation of smoking what
does it do?
18 A. Well, cigarettes are a product that have
been around
19 for a very long time, and this is referred to as
a mature
20 product category. And like other mature
products that have
21 been around for a long time, cigarettes are
advertised
22 primarily to maintain brand loyalty among
current users,
23 and secondarily to attempt to get people who use
competing
24 brands to switch to your brand. It's brand
based at this
25 level.

3142
1 Q. Now, you used the phrase mature in
referring to
2 cigarette products, what does that mean, mature
as opposed
3 to what?

4 A. Well, this is not as mature as it's in an
adult
5 product, that's not what I mean at all. A
mature product
6 is a product in the third phase of its life
cycle.
7 What marketing firms do is identify
a life
8 cycle for a marketing product when it's new,
when it's
9 first introduced, it's totally new to the
market, such as
10 CD players were. When they were first
introduced people
11 didn't know what CD players were, so the
advertising that
12 comes out in the new phase when a product is in
the
13 introductory phase is not really going to
stress the
14 difference between brands, it's going to talk
about CD
15 players in general.
16 Once enough competitors join the
market, and
17 consumers have a lot of options to choose from,
well then
18 the purpose of advertising, this would be a
mature market
19 and the purpose of advertising in that market
is to
20 maintain your share and not lose customers to
your
21 competitors. And the advertising is done to
maintain
22 brand loyalty and to talk about your products
benefits
23 relative to the competition.
24 Q. Well, let me ask you this, you just used
CDs an
25 example of a new product?

3143

1 A. At one time.
2 Q. My kids would disagree with you, but when
CD players
3 first came out, was the advertising for CD
players capable
4 of affecting overall demand?
5 A. Yes. When you have a new product, a total
new
6 product like that, the advertising is going to
educate
7 people about the product category. Well, take
now DVD
8 players, which I don't know enough about to talk
about, but
9 it is a new product. And when I see ads for DVD
players
10 I'm learning about that product category, and it
may be
11 something that I want to enter into. I want to
perhaps be

12 in the market for a DVD player.
13 CD players, I'm not learning
anything new
14 any more except what one brand has to offer
relative to
15 the competition, so there is a difference.
16 Q. And in terms of the notion that cigarette
advertising
17 is brand, is done for brand specific reasons,
market share
18 reasons, are there any reports from the Federal
Trade
19 Commission that support what you are saying on
this point?
20 A. Yes, in fact there are.
21 Q. And let me put up what's be marked as
6516,
22 Demonstrative 6516. What is this?
23 A. This is a statement from the Chairman of
the Federal
24 Trade Commission with regard to tobacco
advertising and
25 it's affect on consumption.

3144
1 Q. And can you read what he said?
2 A. Far from stimulating overall demand by
conveying new
3 information to consumers about the uses of
tobacco
4 generally, tobacco advertising is likely to have
its
5 predominant impact in affecting the consumer's
selection
6 among existing brands.
7 Q. And in that same year, 1987, was there an
economic
8 report of the President that echoed this
sentiment?
9 A. Yes, there was.
10 Q. This is Demonstrative 6517, can you read
that,
11 please?
12 A. There is little evidence that advertising
results in
13 additional smoking, as with many products,
cigarette
14 advertising mainly shifts consumers among
brands.
15 Q. Now, Professor Henke, you have talked
about market
16 segmentation. Are you familiar with the word
targeting as
17 it's used in marketing?
18 A. Yes, very.
19 Q. Targeting has sort of a sinister
connotation; what
20 does it mean in terms of marketing?
21 A. In terms of marketing, in order to be
effective in an
22 ad campaign, for example, you need to know
precisely who
23 the target of your campaign is. It simply means

that you
to direct
develop the

3145
to be met
segment
marketed
worked for
on your
their
were
public
looking at
weaknesses
adolescent
work would
doing this, the

24 need to know your consumer to whom you are going
25 the campaign, and that target is what you
1 campaign around. The needs of the target have
2 and it's simply a way of talking about a market
3 that you are interested in reaching.
4 Q. And is that the way consumer goods are
5 throughout industries?
6 A. Yes.
7 Q. Now, I want to direct you back to when you
8 the Harris organization, while you were working
9 Ph.D.
10 A. Okay.
11 Q. Did you do any work for candy bar company?
12 A. Yes.
13 Q. M&M Mars?
14 A. Yes, I did.
15 Q. Now when M&M Mars would do research on
16 advertising, would they look at consumers who
17 adolescents or kids?
18 A. Well, actually, in their developing a
19 relations campaign or an ad campaign, they were
20 specific targets to determine their strength and
21 with each of those targets, and one of them was
22 consumers and children.
23 Q. What sort of interviewing or focus group
24 they do with those 14 year olds or 15 year olds?
25 A. Well, you know at the time that I was

3146
many people,
losing their
there anything
can
campaign?
potential
with
discuss the

1 candy industry was falling out of favor with
2 sugar was viewed as very bad, and they were
3 sales. And basically their question was, is
4 good about this product that people like that we
5 respond to in an ad campaign or public relations
6 And so adolescents were viewed as a
7 target and there were focus groups conducted
8 adolescent consumers simply to have them

9 product, what they knew about it, when they
used it, how
10 do they feel about candy, about the ingredients
of candy.
11 And then what we would do is follow up the
Harris with
12 national surveys. We would take a national
cross sections
13 of teenagers, for example, and pull some of the
insights
14 that came from that focus group research, put
it into a
15 questionnaire, standardize it, and see
quantitatively how
16 many people feel the way those 2 guys in the
focus group
17 felt. Let's test some of the insights, some of
the
18 propositions that grew out of that focus group.
19 Q. The kinds of work you need to do in order
to target
20 an advertising or advertising campaign to a
particular age
21 group?
22 A. That would be a start, yes.
23 Q. Would it be enough just to get some
general
24 demographic information about how many 14 year
olds eat
25 candy bars?

3147

1 A. No.
2 Q. Now, are you aware of anything about
working people,
3 tradesmen, craftsmen, skilled workers, blue
collar workers
4 that make them more susceptible to advertising
than other
5 groups?
6 A. No, I'm not. And in fact, there is
research looking
7 at specific market segments that have been
accused of being
8 more vulnerable to advertising, such as women.
And the
9 studies show that that's really not the case.
10 Q. Okay. I wasn't going to ask about women,
but are
11 women more susceptible to advertising?
12 A. No, they are not, we are not.
13 Q. I am going to ask you about Virginia
Slims, that's
14 been an issue the jury has heard some evidence
about.
15 Now, Professor Henke, do you believe
that the
16 introduction of women's brands of cigarettes in
the
17 mid-1960's was the cause of an uptake in
smoking among
18 women?
19 A. No, I really don't.

20 Q. And specifically, do you believe that the
advertising
21 for Virginia Slims, beginning in 1967, was the
cause of an
22 uptake in smoking among women?
23 A. No.
24 Q. And what's the basis of that opinion?
25 A. That would be a very simplistic analysis
to try to

3148

1 connect one ad campaign uptake of smoking of
women in the
2 60's. As with any other analysis of why people
begin
3 smoking, you need to look at more than those
advertising
4 factors, especially one single campaign.
5 I remember what was happening in the
60's, and
6 long before the Virginia Slims campaign began,
something
7 called the Woman's Movement started in this
country. And
8 1963 Betty Friedan published the Feminine
Mystique. That
9 kind of launched this women's movement.
Following that
10 was the National Organization of Women was
picketing the
11 Miss America Pageant, women began moving into
the work
12 force into roles that were traditionally held
for men,
13 women began wearing pant suits. There were a
lot of
14 changes taking place among women in that
period.
15 And to say that people, women in
that decade
16 began smoking because of an ad campaign is,
frankly,
17 taking it a little too far, giving advertising
a great

18 deal more power than it has.
19 Q. As an analytical matter, is it possible to
go back to
20 any period of time in our country's smoking
history, and
21 look at some smoking rate and focus only on the
advertising
22 that was going on at that time, with the
exclusion of other
23 factors?
24 A. No, that would be about as effective as
doing it in
25 the 60's. The way I have just outlined, there
are so many

3149

1 other things taking place that you can't just
look at one
2 factor.

again, are
article in
regarding
also obtain
conclusion?
Dr. Pierce
constructing his
Have you
your
the validity
of Dr. Pierce's study?

3 Q. Now, I mentioned earlier, and I'll mention
4 you familiar with Dr. Pierce's February, 1996
5 the Journal of America -- the JAMA article
6 cigarette advertising and it's affect on smoking
7 initiation?
8 A. Yes, I am.
9 Q. Now, have you reviewed that article?
10 A. Yes, I have.
11 Q. And in reviewing that article, did you
12 the data that Dr. Pierce used in reaching his
13 A. Yes, I did.
14 Q. And have you analyzed that data?
15 A. Yes, I've looked at it.
16 Q. And have you analyzed the methodology that
17 used in constructing his data in reaching,
18 survey rather, and reaching his conclusion.
19 analyzed that methodology?
20 A. Yes. Yes, I have.
21 Q. And have you analyze the methodology using
22 expertise in marketing and advertising?
23 A. Yes, I have.
24 Q. And have you reached some opinions about
25 of Dr. Pierce's study?

3150

study?
foundation that
comment on a
a medical
Dr. Pierce
relationship
laid a
to lay a
she's done
or things
I'll sustain
the

1 A. Yes, I have.
2 Q. What are your opinions regarding that
3 MR. ROWE: Objection, lack of
4 this witness's expertise would allow her to
5 methodology of an epidemiological study done by
6 doctor.
7 MR. LERMAN: If he wants to say that
8 didn't conduct a marketing study and had no
9 to marketing, I'll withdraw the question.
10 THE COURT: I don't know if you have
11 foundation that she is qualified. If you want
12 foundation on how many epidemiological studies
13 or how many writings she's done on that topic,
14 of that nature, until you lay the foundation
15 the objection.
16 MR. LERMAN: Let me see if I can lay

17 additional foundation.
18 Q. Dr. Henke, in doing the work that you do,
do you
19 perform regression analyses?
20 A. Yes, I do.
21 Q. Do you understand how to do that?
22 A. Yes, I do.
23 Q. Do you work with statistics?
24 A. Yes, I do.
25 Q. All right. Now, looking at Dr. Pierce's
study, aside

3151
1 from the statistical analysis that he did, did
you analyze
2 his study in terms of the questions he was
asking and the
3 theory that he was using in order to analyze
people's
4 behavior?
5 A. Yes, I did.
6 Q. For instance, did you look at how he
defined
7 receptivity to advertising?
8 A. Yes, I did.
9 Q. Did you look at how he defined
susceptibility to
10 smoking?
11 A. Yes, I did.
12 Q. Did you look to see how he constructed his
questions
13 over time to compile data?
14 A. Yes.
15 Q. And did you consider his expertise on the
way he
16 constructed his survey and whether his data was
17 appropriate?
18 A. Yes, I did.
19 Q. Your understand I'm not going to be asking
you about
20 his statistical regression analysis and whether
or not he's
21 capable of doing statistics, I'm talking about
from the
22 standpoint of marketing analysis and the way to
structure a
23 survey.
24 Did you review Dr. Pierce's work in
that
25 manner?

3152
1 A. Yes, I did.
2 Q. And again, your Honor, I would ask the
witness if she
3 has an opinion regarding the validity of that
study?
4 THE COURT: I'm going to excuse the
jury for
5 just a few minutes. Same admonitions apply.
Don't talk
6 about the case among yourselves, don't form any
opinions

7 or express any. Just go back and wait in the
jury
8 rooming.
9 (The jurors withdrew from the
courtroom and the
10 following proceedings were conducted in open
court:)
11 THE COURT: Why don't you have a
seat.
12 Have you published in this area?
13 THE WITNESS: Not on --
14 THE COURT: You described once you
had done it.
15 Have you ever published anything on the issue
of the
16 formation of a survey or the proper questions?
17 THE WITNESS: Your Honor, I have
developed many
18 surveys in my work.
19 THE COURT: Try to kind of answer my
question.
20 Have you ever published in that area?
21 THE WITNESS: I've published the
results of
22 many surveys.
23 THE COURT: No, but have you ever
published on
24 the formulation of the survey questions
themselves.
25 THE WITNESS: I've written critiques
in that

3153
1 area. They haven't been published in peer
review
2 journals, they have appeared in conference
proceedings.
3 THE COURT: Have you ever given
presentations
4 on the formation of the questionnaire?
5 THE WITNESS: Yes, I have.
6 THE COURT: Is that what you are
referring to?
7 THE WITNESS: Yes, I have. I've
conducted
8 workshops on questionnaire construction.
9 THE COURT: Any in this specific
area in terms
10 of study over time, following adolescents over
a time
11 period, following the reaction that they have
to different
12 questions over different time periods.
13 THE WITNESS: I've addressed the
issue of
14 longitudinal studies.
15 THE COURT: You mean with
adolescents?
16 THE WITNESS: I've worked with
perceptions,
17 people's perceptions and awareness in general.
18 THE COURT: What longitudinal
studies have you

19 done?
20 THE WITNESS: In workshops.
21 THE COURT: Have you ever done any
longitudinal
22 studies yourself?
23 THE WITNESS: I've done longitudinal
analyses
24 for ad agencies to look at their clients.
25 MR. LERMAN: Your Honor, if I could
be heard.

3154
1 I guess where I'm going, what I was trying to
get with my
2 questions was simply this, Dr. Henke is not
going to be
3 addressing the medical aspects of what Dr.
Pierce had to
4 say. What she's going to be looking at is a
matter of
5 he's made essentially a marketing opinion that
advertising
6 causes smoking uptake. And he designed a
survey to prove
7 that.
8 What she is going to do is comment,
as an
9 expert in marketing, and as someone who has
designed
10 surveys, somebody who has done peer review of
other
11 people's work in the field of marketing. She
is going to
12 address the question of how the survey was
constructed and
13 whether or not it really can be used to reach
the
14 conclusion that Pierce was reaching.
15 THE COURT: Well, it may, the only
thing that's
16 causing me some pause is I'm not expert in
longitudinal
17 studies. You are in a position where you have
had this
18 article peer reviewed by the JAMA, and one
would typically
19 expect that the peer review that was done by
them would be
20 rather exhaustive, although we don't have
personal, I
21 mean, I thought that was in the testimony that
they would,
22 they would have sent the JAMA articles out; and
that the
23 leading journals were generally Northeastern
and JAMA.
24 And then the problem I'm having is that then we
are in a
25 position where we are -- the formality of the
actual

3155
1 questionnaire is being criticized by someone

who is at
work.
fact of
that
been peer
then be
experts in the

2 least not directly involved in the same type of
3 MR. BERNICK: I would think that the
4 peer review is something obviously that -- But
5 doesn't mean that the fact that something has
6 reviewed and published doesn't mean it cannot
7 properly criticized or evaluated with other
8 field.

level of
substantially

9 Peer review establishes a certain
10 quality and acceptance, but doesn't mean its
11 immune from criticism.

-- whether
is the

12 THE COURT: I don't mean to suggest
13 she is qualified to make the criticism, I guess
14 question.

The first
study. She
how to
see what
examined

15 MR. LERMAN: I have two responses.
16 one is she is, because this is her field of
17 knows how to study this question and she knows
18 construct a survey and deconstruct a survey to
19 it's really testing, that's number 1.
20 Number two, she's going to be cross

dealt with
hadn't done any

21 by, obviously, by plaintiffs on this issue.
22 THE COURT: Well, maybe --
23 How many surveys have you done that
24 longitudinal -- I'm sorry, did you say you
25 longitudinal surveys?

3156
remember. I've
designed
is kind of
follows the
representative
like this
period of time?

1 THE WITNESS: I'm trying to
2 given workshops.
3 THE COURT: Have you ever done any,
4 the questions for longitudinal surveys?
5 THE WITNESS: Advertising tracking
6 longitudinal survey.
7 THE COURT: That's not one that
8 same population over time.
9 THE WITNESS: It follows the
10 population; it is not a panel study.
11 THE COURT: Have you ever done one
12 that's followed the same population over a

13 THE WITNESS: The specific
individuals, no, but
14 that's not really different from the
methodology that you
15 would use in a cross sectional.
16 THE COURT: Have you ever written
anything on
17 these, on the format of questions for a
longitudinal study
18 or the format for questions on cigarettes other
than
19 the -- was that an article you published the
study?
20 THE WITNESS: I have referred to
that article,
21 yes, in the Journal of Advertising Research.
22 MR. LERMAN: Your Honor, if I could
clarify one
23 thing for the court, and maybe you are aware,
when you are
24 asking about the longitudinal aspects of the
study and
25 focusing on that, and Professor Henke is not
going to be

3157
1 testifying about whether because 25 percent of
Pierce's
2 respondent's dropped out of the survey that
makes it valid
3 or invalid.
4 THE COURT: I've read her report.
As I
5 understand, she is going to say by the fact
that someone
6 would wear a Joe Camel T-shirt is not a fair
7 representation that they are now susceptible to
tobacco.
8 MR. LERMAN: For example, I mean she
is going
9 to make the following point, which is, if
somebody says
10 they wouldn't wear a Joe Camel T-shirt, that's
not a
11 measure of the impact of advertising under
susceptibility
12 of advertising, it is a measure of attitudes
that are
13 developed on smoking which are a factor of peer
pressure,
14 family influence.
15 THE COURT: I think she has given
that
16 testimony. The real question I have is in
citing the
17 Pierce study, she takes the position that the
categories
18 she is leveled, he's smoked over a hundred
cigarettes or
19 smoked any cigarettes, are improperly designed.
20 MR. LERMAN: She's not going to get
into that.
21 THE COURT: Do you want to just

briefly be

22 heard, because I want to move on.

23 MR. ROWE: We would oppose her

testifying in

24 this, your Honor, because we don't believe a

foundation

25 has been laid that she has the expertise in

this area.

3158

1 She herself has said under oath that what
should be done

2 in this area is a longitudinal study. She
hasn't done it;

3 Dr. Pierce has. She is in no position to know
what goes

4 into doing a longitudinal study, and she hasn't
done them

5 herself.

6 THE COURT: Why don't we get the
jury.

7 I'm going to -- I forgot now though
what the

8 question was. Be careful in terms of how far
you take

9 her. I'll deal with it on a question by
question basis,

10 but I don't know that you have established a
foundation

11 that she's qualified to testify as to his
methodology,

12 generally, but she may be qualified to testify
as to the

13 nature of certain of the questions, having done
this

14 research. Most of the rest may go to weight.

15 MR. LERMAN: Okay.

16 THE COURT: But I'll deal with it
dependent

17 upon how far you try to take this.

18 MR. LERMAN: And I think I
understand what you

19 are saying, your Honor, and I'll fry to stay
within that

20 area.

21 (The jury was returned to the
courtroom and the

22 following proceedings were conducted in open
court:)

23 THE COURT: If the jury will please
take their

24 seats. Mr. Lerman.

25 MR. LERMAN: Thank you, your Honor.

3159

1 Q. Professor Henke in Dr. Pierce's study, we
are talking

2 about the February 1998 JAMA study, he uses a
variable that

3 he calls receptivity. Are you aware of any
other marketing

4 or advertising, or communications study that has
used the

5 variable receptivity?
6 A. In all the years in 25 years that I have
been
7 conducting research and teaching in this area, I
have never
8 encountered Dr. Pierce's variable of
receptivity.
9 Q. In analyzing the Pierce study, did you
look at the
10 receptivity variable to see whether or not it
was
11 constructed in a way that is consistent with
research
12 methods and marketing and advertising?
13 A. Yes, I did.
14 MR. ROWE: Objection to the line of
15 questioning.
16 THE COURT: Sustained.
17 BY MR. LERMAN:
18 Q. Does the receptivity variable in fact
measure the
19 impact of advertising?
20 MR. ROWE: Objection, lack of
foundation.
21 THE COURT: I'll allow that. I'll
allow her to
22 answer on that.
23 THE WITNESS: No, it doesn't. It's
a
24 collection of variables.
25 BY MR. LERMAN:

3160
1 Q. All right. In your view, what does the
receptivity
2 variable measure, as it's constructed?
3 A. The receptivity variable measures attitude
and
4 willingness to use a promotional item provided
free from
5 tobacco companies.
6 Q. And what's wrong with that, in a study
that's
7 designed to measure the impact of advertising?
8 A. The willingness to use a freebie from a
tobacco
9 company is indicative of underlying attitudes.
People who
10 are not willing to accept any free item because
it's from a
11 tobacco company have a particular attitude
toward the
12 company, unlike those who are willing, neutral
to accept.
13 What is not being measured in this,
is what
14 forms that willingness? What forms that
attitude?
15 Q. And when you are saying what is not being
measured in
16 this, what specifically are you referring to?
What's
17 missing from the measurement, or what precisely

is the
18 concern that you are expressing?
19 A. What kind of social factors have formed
the
20 willingness to use or not to use? What kinds of
21 interactions with parents or peers has informed
and
22 developed that attitude of willingness to use or
a lack of
23 willingness to use or an adamant unwillingness
to use?
24 Q. All right. And in your view, therefore,
is the
25 receptivity variable controlled or not
controlled for

3161
1 parental and peer influences?
2 MR. ROWE: Objection, lack of
foundation.
3 THE COURT: Overruled.
4 THE WITNESS: It's redundant with
measures of
5 exposure of parents who smoke and exposure to
peers who
6 smoke. And if those three variables, peer
exposure,
7 parents exposure, and receptivity are used in
the same
8 configuration, there is a compounding of those
measures
9 within that equation, there is not control.
The
10 receptivity measure would need to be removed
because it's
11 redundant with the other two factors.
12 Q. So, in other words, has Dr. Pierce, in
constructing
13 the receptivity variable, has he been able to
isolate
14 advertising and take out these other variables,
parental
15 and social impact, peer impact?
16 A. No, no.
17 Q. And is that an important part of your
criticism of
18 the Pierce article?
19 A. Yes, it is.
20 Q. Are you saying, is it fair then -- let me
just ask it
21 straight. Are you saying, then, that
receptivity is
22 another way of measuring parental and social
influences?
23 A. No, it would be a measure of the attitude
which is
24 formed by parental and social influences; it's
not
25 equivalent, but it's growing out of those
influences; and

3162
1 therefore it is a redundant measure.

2 Q. And of those persons in Dr. Pierce's study
who went
3 on to experiment with smoking, did you take a
look at Dr.
4 Pierce's study to see what their peer influences
were?

5 MR. ROWE: Objection, lack of
foundation.

6 THE COURT: Do you have any personal
knowledge?

7 THE WITNESS: I have the data set,
your Honor.

8 THE COURT: Does that say one way or
the other
9 whether there was investigation of the peer
issue?

10 THE WITNESS: I looked at the data
that he

11 collected.

12 THE COURT: Well, does it say one
way or the

13 other whether there is information on the peer
influence?

14 THE WITNESS: I looked at the
correlation.

15 THE COURT: Well, my question is
kind of

16 simple. Did it say one way or the other
whether there was

17 information on the peer influence?

18 THE WITNESS: Yes.

19 THE COURT: Go on, and I'll overrule
the

20 objection.

21 BY MR. LERMAN:

22 Q. What kind of information precisely was
provided --

23 just to back up. You got access to Dr. Pierce's
underlying

24 data, is that right?

25 A. That's right.

3163

1 Q. You looked at the questionnaires that
people

2 responded to?

3 A. Yes.

4 Q. And you analyzed those questionnaires with
respect to

5 those people in the survey who began smoking at
the end of

6 the three years, is that right?

7 A. That's right.

8 Q. And when I'm talking about peer influences
or the

9 effect of peers, what precisely did you look at?

What

10 questions did you look at with respect to peers?

11 A. I looked at the relationship between
exposure to

12 peers who smoked, and smoking among the
respondents. I

13 looked at the relationship between the exposure

to parents
14 who smoked and ultimate smoking, and I found a
very strong
15 relationship, especially for exposure to peers
who smoke,
16 and the uptake of smoking.
17 Q. Okay. Which is consistent with your view
on what
18 influences kids to smoke?
19 A. Very, yes.
20 Q. Dr. Henke, just to conclude. In your
expert opinion,
21 based on your expertise and to a degree of
scientific
22 certainty in your field, did the defendants in
this case,
23 through their cigarette advertising and
promotion, cause an
24 increase in adolescent smoking?
25 A. In my opinion, based on all the research
that I have

3164
1 talked about here, and based on my expertise in
this area,
2 no.
3 MR. LERMAN: Your Honor, I have
nothing
4 further.
5 THE COURT: Cross examination.
6 MR. ROWE: Thank you, your Honor.
7 CROSS EXAMINATION
8 BY MR. ROWE:
9 Q. Good morning, ladies and gentlemen of the
jury.
10 Good morning, Professor Henke?
11 A. Good morning.
12 Q. My name is Jonathan Rowe, and we haven't
met before,
13 have we?
14 A. No.
15 Q. Miss Henke, you have testified that the
tobacco
16 industry spent 6 million dollars on advertising
roughly?
17 A. Yes.
18 Q. Is that a resentence figure?
19 A. Yes, it is.
20 Q. And is it also true that the tobacco
industry spends
21 about 5 billion dollars when you consider
advertising and
22 promotions taken together on an annual basis?
23 A. I'm not sure of that figure.
24 Q. Could we put up the first exhibit, Steve?
25 Second page.

3165
1 This is a report of the Federal
Trade
2 Commission from 1995. You can see that the
Federal Trade
3 Commission says there was 4.9 billion dollars.

Do you see
4 that?
5 A. Yes, I do.
6 Q. Do you have any reason to doubt that
figure?
7 A. No, I really don't.
8 Q. Do you accept my representation that
figure came from
9 information supplied by the tobacco industry?
10 A. I'll accept that, yes.
11 Q. If we could go to the next exhibit.
12 This is a report of the Surgeon
General from
13 1989. And if you could go to the paragraph we
have
14 highlighted.
15 Do you see where it says, in 1988
cigarettes
16 ranked first among products advertised in
outdoor media;
17 second in magazines; and sixth in newspapers.
When
18 advertising expenditures enters three print
medias
19 combined, cigarettes were the second most
heavily
20 advertised product after passenger cars.
21 Do you see that?
22 A. Yes, I do.
23 Q. And it would be true in 1989, the
cigarette industry
24 was not able to advertise on television or radio
like the
25 passenger car business could, right?

3166
1 A. That's right.
2 Q. So at least as of 1989 the expenditures on
cigarette
3 advertising were quite a bit higher than the 600
million
4 figure you quoted as of the present day, right?
5 A. I'm not sure just looking at this that I
would want
6 to compare the figures.
7 Q. Well, you can see looking at this it was
at least
8 second of all products, whereas the chart you
put before
9 the jury showed that the advertising had gone
down and they
10 were no longer second among all products?
11 MR. LERMAN: I object to the form,
your Honor.
12 THE COURT: Sustained.
13 BY MR. ROWE:
14 Q. Do you have any doubts that cigarettes
were the
15 second most heavily advertised product in the
United States
16 in 1988?
17 A. I'm not sure about that, specifically.
18 Q. Do you have any reason to doubt that

figure?

19 A. I would want to compare it to mine.

20 Q. You would like to compare the Surgeon

General's

21 figure to your own figure?

22 A. From those that I have from the
advertising industry.

23 Q. And you have figures on 1988 sales?

24 A. I don't have them with me now, no.

25 Q. In fact, in the last 10 years, the
cigarette industry

3167

1 has shifted the focus of it's marketing
activities from

2 advertising to promotion, isn't that right?

3 A. Absolutely.

4 Q. And when you use the figure 600 million
dollars you

5 had no intent to mislead this jury into thinking
that only

6 600 million dollars was being spent on
marketing, did you?

7 A. Absolutely not. I said in fact that it
was

8 advertising spending.

9 Q. And you are a professor of marketing not a
professor

10 of advertising, right?

11 A. Marketing communication is my area.

12 Q. And marketing communications involves not
only

13 advertising, but also those promotions on which,
in 1995,

14 the tobacco industry spent 4 billion dollars,
right?

15 That's part the of the marketing, right?

16 A. Promotion is part of marketing, yes,
marketing

17 communication.

18 Q. Now, you offered an opinion about whether
advertising

19 can affect cigarette consumption among youth.
Do you have

20 the same opinion about promotions? Do you
believe that

21 promotions cannot create -- cause a young person
to start

22 smoking?

23 A. Yes.

24 Q. You also believe, do you not, that
advertising cannot

25 cause a person to continue smoking, is that
right?

3168

1 A. That's right.

2 Q. That's an opinion you have expressed in
this case,

3 right?

4 A. Yes.

5 Q. It hasn't always been your opinion though,
has it?

6 A. I'm not sure.
7 Q. Do you remember being deposed in 1997 in
the
8 litigation involving Mississippi?
9 A. Yes.
10 Q. This is page 75 of your deposition where
you were
11 asked: Do you think that cigarette advertising
or
12 promotion plays a role in smokers continuing to
smoke?
13 And your answer then was: It
depends on the
14 smoker.
15 But it can?
16 And you said, yes.
17 Do you remember that?
18 A. Yes, I see that.
19 Q. But soon afterwards, in the three or four
other cases
20 in which you have testified on behalf of the
tobacco
21 industry, you have changed your opinion, and you
now offer
22 the opinion that you did today in court, that
advertising
23 cannot cause a person to continue smoking,
right?
24 MR. LERMAN: I object, your Honor.
I think
25 that's a mischaracterization of the testimony
today. I

3169

1 object to form.
2 THE COURT: Overruled.
3 THE WITNESS: I think that I have
become more
4 specific. What you just put up there was my
first
5 deposition, it's a very intimidating
experience.
6 BY MR. ROWE:
7 Q. And after that deposition you had
conversations with
8 the lawyers for the tobacco industry and they
explained to
9 you that that wasn't an answer that the tobacco
industry
10 could abide by?
11 A. No, I don't think so.
12 Q. There weren't any studies published
between March of
13 1997 when you said, yes, advertising can cause a
14 continuation in smoking, and the next time when
you said,
15 no, where there?
16 A. '97 and '98?
17 Q. In March of 1997 you said, yes,
advertising can
18 continuing smoking; by March of 1998 you said,
no, it
19 can't. There weren't any studies published on

that subject

20 that caused you to change your mind, where
there?

21 A. There were a lot of studies published
between '97 and

22 '98. I'm not sure if you are referring to a
specific one

23 or not.

24 Q. Can you point to a study that caused you
to change

25 your opinion between March of 1997 and March of
'98?

3170

1 A. I'm not sure that is a change in my
opinion.

2 Q. You don't think it's a change of your
opinion when

3 you said yes in March of '97 and no in March of
'98; that's

4 not a change of opinion?

5 A. I think I said it depends on the smoker
and the

6 situation as well.

7 Q. Did you think there was some ambiguity in
the

8 question that was asked, do you think that
cigarette

9 advertising or promotion plays a role in smokers
continuing

10 to smoke? And you said yes, you think there was
ambiguity

11 there that you didn't understand?

12 A. No.

13 Q. The fact of the matter is, the tobacco
industry

14 lawyers told you that the tobacco industry can't
abide this

15 position, and you changed your testimony, didn't
you?

16 A. No, sir, I did not.

17 Q. In any event, today you believe, or you
express the

18 opinion that advertising can't cause smokers to
continue

19 smoking, right?

20 A. Yes.

21 Q. Promotions cannot cause smokers to
continue smoking,

22 right?

23 A. Yes.

24 Q. This is an advertisement for advantage.
Do you see

25 the title of it, To Smoke Or Not to Smoke?

3171

1 A. Yes.

2 Q. That is the question. Can you read it?
Maybe you

3 can read it closer on the one to the side. With
all the

4 slings and arrows that have been aimed at
smoking, you may

5 well be wondering why you smoke at all. If you
don't
6 smoke, nobody is urging you to start.
7 I'm sure the lawyers got that one in
there.
8 But if you do smoke --
9 MR. WEBER: Objection, your Honor.
Move to
10 strike.
11 THE COURT: Disregard the last
comment of the
12 attorney.
13 MR. ROWE: You may enjoy it so much
you don't
14 want to stop. And it goes on and talks about
the
15 advantage of Vantage. And you see at the end
it says,
16 while Vantage isn't the lowest tar and nicotine
cigarette,
17 you will find it's probably the lowest one you
will enjoy
18 smoking. If you smoke, try a pack of Vantage;
and if you
19 don't, why not show this to someone who does,
it might
20 settle the question.
21 What question do you think is being
proposed
22 there.
23 A. Whether to smoke Vantage.
24 Q. You don't think it's the question at the
top: To
25 smoke or not to smoke, that is the question?

3172
this is a
1 A. No, this is what the headline is. But
2 Vantage ad.
3 Q. So your interpretation, as an expert in
the field of
4 marketing, is that this ad doesn't speak to
someone whether
5 to quit smoking?
6 A. No, if that were the case you wouldn't see
Vantage if
7 that ad was to increase smoking.
8 Q. You mean it would be an ad for all the
cigarettes?
9 MR. LERMAN: Your Honor, I object to
the form
10 and I would like to be heard on the relevance
of this line
11 of questioning, which doesn't speak to the
youth marketing
12 at all.
13 THE COURT: Overruled.
14 I don't know that there is a
question pending.
15 So ask another question.
16 BY MR. ROWE:
17 Q. You don't think this ad speaks to someone
who's

18 thinking about quitting smoking?
19 MR. LERMAN: Again.
20 THE COURT: I think she went into
it. She went
21 into what effect advertising has among people
as between
22 competition among brands. So I think she went
into it.
23 So if the ground's are relevance are
within the
24 direct examination, I think it is within it.
25 MR. LERMAN: Thank you, your Honor.

3173
1 THE WITNESS: You know, I don't know
anything
2 about this campaign. All I know is that this
is an ad for
3 a brand, and I don't even know whether this ran
and with
4 what effect. So if you are asking me what the
effect of
5 the ad is, I'm giving you my opinion on that.
And if you
6 have other questions about intent, I'm really
not speaking
7 to that. I don't even know if this ran or if
they ever
8 used it.
9 Q. I'll represent to you that the ad ran.
Does that
10 change your opinion?
11 A. No, it doesn't.
12 Q. Does the field of marketing require you to
check your
13 common sense at the door?
14 A. I find that very insulting and I think
that was an
15 unnecessary question.
16 Q. It's not meant to be insulting, Professor
Henke, it's
17 meant to say, this ad says in plain English to
smoke or not
18 to smoke. Are you telling this jury this has no
impact on
19 a person who's thinking about quitting smoking?
20 A. I would have to do some research to see
how it
21 affects people who smoke Vantage.
22 Q. You know that sometimes products are
advertised that
23 a person hasn't decided to use and they are both
brand
24 specific and asking the person to consider using
that
25 product; would you agree with that?

3174
1 THE COURT: I don't understand the
question.
2 MR. ROWE: I'll rephrase it, your
Honor.
3 Q. When I see an ad for a lawn mower, and I'm

a consumer
John Deere
get me to buy
category of
impact can
category.
see
jury, can
have no
smoking or to
may even
smoker? Is
says to
think that
they feel it
have any
smoking?

4 who has never owned a lawn mower, it may say
5 lawn mower, but it's an ad that both tries to
6 a lawn mower and to buy a John Deere, right?
7 A. I don't think lawn mowers fall into the
8 new products or innovations, which is where an
9 be had on the decision to enter a product
10 Q. So you would see that the same way as you
11 cigarettes, that cigarettes, you are telling the
12 only be advertised for a brand, and the ad can
13 impact on a person who's deciding to start
14 continue smoking, right?
15 A. A non-smoker may look at this ad, note it,
16 read it, but it's not relevant.
17 Q. And what about the person who's already a
18 this -- does this add relevance to them when it
19 smoke or not to smoke, that is the question, you
20 has any relevance to them?
21 A. It may endear them more to the brand if
22 resonates with what they are thinking.
23 Q. It will endear them to the brand but won't
24 effect on their decision about whether to quit
25 A. I'm telling you --

3175
over this.

1 THE COURT: I think we have been
2 Why don't you go on.
3 BY MR. ROWE:
4 Q. How about this ad? Any impact on the
5 thinking about quitting smoking?
6 A. Well, according to the chairman of the
7 other studies that I've identified, no.
8 Q. No effect?
9 A. No.
10 Q. You are saying the chairman of the FTC
11 ad?
12 A. No, I wouldn't say something like that.
13 Q. All the fusses about smoking got me
14 either quit or smoke True. I smoke True. And
15 testimony to this jury that doesn't speak to a
person who's

16 thinking about quitting smoking?
17 A. If it did it would probably be more
prevalent in the
18 advertising. No, I don't think that this is
fruitful, if
19 what you are saying the effects should be are.
20 Q. Do you have an opinion about, as an expert
in
21 marketing, about what's interpreted by a
consumer by the
22 word the fuss about smoking. Do you know what
the fuss
23 about smoking would be to a consumer?
24 A. To me as a consumer?
25 Q. I'm asking for your expert opinion about
the way, you

3176
1 are an expert in how consumers react to ads,
aren't you?
2 A. Thank you, yes.
3 Q. And in light of that, do you have an
expert opinion
4 about how consumers react to the phrase the fuss
about
5 smoking?
6 A. Well, it would really depend on when this
was
7 advertised, when it appeared, in which medium
for which
8 consumers.
9 Q. Well, assume that this is being read by
adult smokers
10 who are thinking about quitting, you see the
phrase the
11 fusses about smoking, do you have an opinion
about what
12 meaning they take from those words?
13 A. It was probably a reference to the debate
that has
14 been raging for decades regarding the health
effects of
15 smoke.
16 Q. Is it the reference to the 420,000 people
a year who
17 die from smoking?
18 A. I don't see that this there.
19 Q. You don't see that in there. As an expert
in
20 marketing do you think the tobacco industry is
well advised
21 to use the phrases the fuss about smoking when
they are
22 talking about 420,000 people a year dying?
23 MR. LERMAN: Object to the form.
24 THE COURT: Sustained.
25 BY MR. ROWE:

3177
1 Q. Now, you have been consulting with the
tobacco
2 industry since 1992?
3 A. I have met with, yes.

4 Q. Have you ever told the tobacco industry
that running
5 ads like this, they are barking, up the wrong
tree, they
6 can't really get people to continue smoking if
they are
7 thinking about it?
8 A. No, I don't believe that was ever a
discussion I had
9 with them.
10 Q. You testified to the jury that your
research is
11 independent of the tobacco industry, is that
right?
12 A. That's right.
13 Q. And you reference in particular a 1995
study you did
14 in a small southern town in Maine?
15 A. That's right.
16 Q. It was a study of 83 middle class children
between
17 the ages of 3 and 6 or 3 and 8?
18 A. 3 and 8.
19 Q. And that was a study you published in
1995, right?
20 A. That's right.
21 Q. But you sent that study to lawyers for the
tobacco
22 industry back in October of 1993, didn't you?
23 A. That's right.
24 Q. Did you ask them whether they approved of
the
25 findings?

3178

1 A. No, I didn't.
2 Q. Do you normally send research two years
before it's
3 been published to lawyers to the tobacco
industry?
4 A. I send research to people who are
interested in my
5 research and express an interest my research.
And I've
6 received requests for copies of my research from
all over
7 the world. And when I will comply I will do
that and send
8 people copies of my research.
9 Q. The fact is you designed the 1995 study
specifically
10 to try to assist the tobacco industry in
answering charges
11 that had been made about Joe Camel, isn't that
right?
12 A. No, that's not true.
13 Q. They certainly submitted your 1995 study
to the FDA,
14 didn't they?
15 A. They submitted that to the FDA in '95, '96,
and I
16 submitted a report along with that.
17 Q. This is the FDA findings on your study

that were
we could go
sample, and
employed in
author's
populations.
this sample
the
Do you

18 published in the Code of Federal Register. If
19 to the next page. The FDA said, first, the
20 that's referring to your sample or your study,
21 this study was both inadequate to test the
22 hypothesis and is non-generalizable to other
23 There were only 83 participants in the study,
24 is too small to allow for adequate power to test
25 author's fine-grained hypothesis concerning age.

3179

1 remember receiving that criticism from the FDC?
2 A. Yes, I --
3 Q. That's a criticism you have leveled at
other studies.
4 You criticized the Beaver study for having too
small a
5 sample size?
6 A. I don't think I criticized the Beaver
study. It is a
7 different kind of study, a qualitative study.
8 Q. But you did criticize it because it for
having too
9 small a sample size?
10 A. For projecting to a wider population, but
you didn't
11 need to go to the FDA to find these criticisms.
Actually
12 they are in the back of my article in the
seconds of
13 limitations on the study, which is standard
practice.
14 Q. Among the limitations on the study is that
it was not
15 a longitudinal study?
16 A. That is definitely a limitation. Ideally
you would
17 like to see a longitudinal study to find changes
over time
18 in the same population.
19 Q. You would like to see a longitudinal
study. If you
20 were going to try to answer the question, does
advertising
21 cause children to start smoking, wouldn't you
have
22 testified to that?
23 A. That's right.
24 Q. And that's the kind of study Dr. Pierce
did, the Dr.
25 Pierce you were criticizing a few minutes ago on
direct

3180

1 examination?

2 A. That's right.
3 Q. He did a longitudinal study to determine
if children
4 were caused to start smoking by advertising,
right?
5 A. That's right. Excuse me, I would qualify
that
6 response, that is what he has claimed to do in
that study,
7 yes.
8 Q. And the FDA also said the interview
process you used
9 in your 1995 study to collect the data from the
study and
10 even the nature of the interviewers themselves
greatly
11 limits the conclusions that may be drawn from
the study.
12 Was that also a limitation that you
disclosed
13 at the back of your study?
14 A. No. I think the interview process was
adequate, and
15 that I don't consider a limitation at all. I
had trained
16 interviewers and they learned the non-verbal
methodology
17 that I was using. We went through it several
times before
18 they interviewed the children.
19 Q. And the FDA did not agree with you and
felt that the
20 nature of the interviewers, both in the terms of
who the
21 interviewers were and the way the interviews
were
22 conducted, invalidated the results?
23 A. In this FDA report, yes, there was a
criticism on
24 that level. I take issue with that.
25 Q. Now, the FDA isn't the only independent
source to

3181

1 doubt the value of your 1995 study, is it?
2 A. I'm sorry, that did what?
3 Q. I said the FDA isn't the only independent
source to
4 doubt the value of the findings from your 1995
study?
5 A. I'm not aware of additional published
criticism of
6 the study.
7 Q. Your 1995 study was one in which you, as
you
8 displayed on direct exam, asked children, do you
think
9 smoking is bad? Do you think Joe Camel is bad?
Is that
10 right?
11 A. That's right.
12 Q. And you recognize Christine Jackson as a
respected

13 researcher in your field?
14 A. Yes, I do.
15 Q. In fact, you cited her 10 times in your
expert report
16 in this case?
17 A. Yes, she does very good work.
18 Q. Four different studies of hers, right?
19 A. Yes.
20 Q. Are you familiar with her 1998 study
Cognitive
21 Acceptability to Smoking and Smoking Initiation
in
22 Childhood, a Longitudinal Study?
23 A. Yes, I am.
24 Q. If we could blow up the paragraph on the
left.
25 Dr. Jackson stated, it is commonly
held that

3182
1 most, if not all, children have a negative
attitude about
2 smoking. Indeed it is likely that if the
present study --
3 she is referring to her own study?
4 A. Yes.
5 Q. If the study had asked children to
evaluate the good
6 or bad effects of smoking, most would have
indicated a
7 negative attitude about smoking. It is
important to note,
8 however, that children can report a negative
attitude about
9 smoking and still be cognitively predisposed to
the
10 susceptibility to smoking?
11 A. Right. That is absolutely true. That is
what I
12 meant by the social desirability response.
13 Q. So when your study asked children in Maine
is smoking
14 bad for you, and from that you jump to the
conclusion that
15 advertising was not causing an uptake in
children's
16 smoking, Dr. Jackson would caution you that you
may need to
17 look to see if these children are still
susceptible to
18 smoking, wouldn't you?
19 A. I did not conclude in that study anything
about
20 uptake of smoking. I was simply identifying the
separation
21 between brand recognition and logo recognition
and
22 attitude.
23 Q. Now, when you expressed the opinion that
ads and
24 promotions play no role in getting people to
smoke, the
25 people we are talking about are mostly children,

right?

3183

1 A. That goes for all consumers.
2 Q. But you are aware that government studies
show that
3 the vast bulk of smokers start before they are
age 18?
4 A. I've seen many figures on that regarding
smoking
5 before 18.
6 Q. Do you have any reason to doubt that 85 or
90 percent
7 of smokers start before age of 18?
8 A. Well, I would, I would ask you what the
definition of
9 smoking is. And there are many different
definitions of
10 smoking in the studies that I have seen.
11 Q. How about this definition, do you know who
Mrs. Lynn
12 Beasley is?
13 A. I've heard of her, I don't know her.
14 Q. She's the head of marketing at R.J.
Reynolds Tobacco
15 Company. Do you know her?
16 A. No, I've never met her.
17 Q. She testified last week 50 percent of
smokers are
18 daily smokers before the age of 18. Is that
definition
19 good enough for you?
20 A. I'm not familiar with that figure.
21 Q. This is a print publication of the
National Academy
22 Press. It says that 89 percent of adults who
are daily
23 smokers began smoking sometime before the age of
18. Would
24 you accept that statistic?
25 A. You know, I would even point to Dr.
Pierce's study

3184

1 and what he identified in terms of the smoking
continuum
2 and what Christine Jackson talks about in the
smoking
3 continuum. There are periods of time
adolescents, out of
4 curiosity, will puff cigarettes and decide this
is not for
5 them. They satisfy their curiosity and they
leave. In
6 some studies people who then later begin smoking
on a
7 regular basis are asked when did you start, and
that first
8 puff, whether it's 10 years earlier or 20 years
earlier is
9 going to lock in as the time they started
smoking there, is
10 a lot of variation in how smoking is defined,

that's what I
11 think when I look at the studies.
12 Q. This is from the Center for Disease
Control. They
13 say that approximately 3 million U.S.
adolescents are
14 smokers and they smoke nearly one billion packs
of
15 cigarettes each year. The average age at which
smokers try
16 their first cigarette is 14 and a half years,
and
17 approximately 70 percent of smokers become
regular smokers
18 by age 18.
19 Is that statistic one we could work
with for
20 purposes of this examination, 70 percent are
daily smokers
21 before age 18?
22 A. 70 percent of smokers become daily before
18.
23 Q. So when we talk about the questioner, you
are here to
24 address to the jury whether cigarette
advertising causes
25 people smoking, we are primarily talking about
children,

3185
1 aren't we, under the age of 18?
2 A. We are addressing children today and
adolescents
3 today, but the same holding true for adults and
the affect
4 of the tobacco advertising promotion on adults.
5 Q. And I assume as a scientist you bring an
open mind to
6 the question?
7 A. Yes.
8 Q. Even though you have expressed opinions on
it, you
9 are willing to consider new information when it
comes
10 available to you?
11 A. Sure.
12 Q. And you yourself don't administer a budget
on the
13 order of five billion dollars a year, do you?
14 A. No, I don't.
15 Q. So if you had information available to you
from the
16 people who administer a five billion dollar a
year
17 advertising and promotion business, would that
be of
18 relevance to you in trying to decide whether
advertising
19 and promotion can play a role in getting kids to
smoke?
20 A. You mean would somebody's budget affect my
decisions
21 and my opinions about the effects of

advertising.

22 Q. No, I'm sorry, I wasn't clear with the
question.

23 What I was asking is, if you knew that the
people who are

24 responsible for running a 5 billion dollar a
year marketing

25 program had expressed opinions about whether
they think

3186

1 advertising can cause people to start smoking,
would you be
2 interested in that information as part of your
opinions

3 being expressed to this jury?

4 A. Well, it would be interesting.

5 Q. This is Exhibit 1467, it's a brand
promotion plan

6 from 1977 from the Brown & Williamson Tobacco
Company.

7 That's one of the companies that hired you to
testify in

8 this case, right?

9 MR. BERNICK: Objection, to the
absence of

10 foundation. That is a mischaracterization of
the

11 document.

12 THE COURT: It's not what --

13 MR. BERNICK: It's not even the
complete

14 document, that is an attachment to the
transmittal letter.

15 MR. ROWE: We'll be happy to use
1467-A and --

16 MR. BERNICK: That will show there
is no

17 foundation for this witness --

18 THE COURT: We don't have a
question. Why

19 don't you ask the question and see what the
question is.

20 MR. ROWE: If we could go to page
17.

21 MR. BERNICK: I would object to his
displaying

22 the page at this point. I object to it on the
grounds

23 that I previously --

24 THE COURT: I don't know what the
document

25 says. Would somebody bring a copy of it up
here.

3187

1 MR. LERMAN: I have one, judge.

2 MR. BERNICK: The document tags
attached as

3 transmittal letter is from somebody other than
Brown &

4 Williamson.

5 MR. ROWE: I want to use that

paragraph you are

6 looking at there, that has the writing on it.

7 MR. BERNICK: This is an outside
submittal,

8 there is no evidence it was ever effectuated,
and he wants

9 to use the handwriting which was never
identified, which

10 this witness cannot identify, to make arguments
to the

11 jury a on a matter this witness doesn't have
cognizance

12 of.

13 THE COURT: I think it says --

14 MR. ROWE: This document says Kools
have a --

15 THE COURT: Is there any foundation
that this

16 advertising agency's promotion program was
accepted?

17 MR. ROWE: Even if it wasn't, it
would show an

18 advertising agency hired by the defendants
thinks that an

19 advertising plan convinced starters to smoke
Kool.

20 THE COURT: There is a showing that
this was an

21 advertising agency affiliated with Brown &
Williamson.

22 MR. ROWE: This is on the Brown &
Williamson

23 web site, we pulled this document right off
their web

24 site.

25 MR. COUGHLIN: There is no question,
it's in

3188

1 their advertising.

2 THE COURT: Is there any question
about that?

3 MR. BERNICK: About what? This was
an

4 advertising agency for Brown & Williamson?

5 THE COURT: Yes.

6 MR. BERNICK: I'm not going to raise
that

7 question, your Honor.

8 THE COURT: I think it may have some
relevance

9 because she has portrayed herself on evidence
on

10 marketing. And if Brown & Williamson -- I
think there is

11 some relevance.

12 MR. BERNICK: There are several
problems. One

13 is she is not a witness for this document to be

14 established that is what was this plan ever
effectuated,

15 was there anything done about it? Also, she
cannot

16 establish a foundation for what they really
want to do is
17 give a handwritten comment. The handwritten
comment.
18 MR. ROWE: The handwritten comment.
She
19 knows --
20 MR. BERNICK: Excuse me.
21 THE COURT: Why don't you put it on
the Elmo
22 and put pieces of paper over the handwritten
portion.
23 MR. BERNICK: I believe the question
posed to
24 the witness was, if you were shown a brand plan
that
25 suggests this was a plan that was actually
effectuated,

3189
1 and there is absolutely no evidence that this
was a
2 proposal that was made.
3 THE COURT: Stay away from the use
of that
4 term, I don't understand that she answered that
question.
5 MR. ROWE: Your Honor, if I could be
heard.
6 THE COURT: Let's get on.
7 (The following proceedings were
conducted in
8 open court.)
9 THE COURT: Do you have another
question?
10 MR. ROWE: We were just trying to
get the
11 document up.
12 THE COURT: Okay.
13 MR. ROWE: Thank you, your Honor.
14 Q. Professor Henke, this is a document that
was produced
15 from Brown & Williamson's files, and you can see
that in
16 1977, it was written, there is a category
promotions to
17 young?
18 THE COURT: Give a foundation as to
who wrote
19 it?
20 MR. ROWE: It's written by an
advertising
21 agency that is working for Brown & Williamson.
Since Kool
22 is heavily oriented toward the young and the
brand's
23 starter index is 10 --
24 Do you know what a starter index is?
25 A. More or less.

3190

1 Q. What is that?
2 A. It would be taking an amount of

consumption, for
3 example, and scaling it to be the average on a
hundred, and
4 that would be the starter index. And then with
increases
5 it would occur on a percentage of 100, increase
or
6 decrease, it's a starting point, it's a
benchmark, it's a
7 baseline.
8 Q. It's a way of measuring how many people
are starting
9 their consumption of cigarettes with that
particular brand,
10 is that fair?
11 A. In this context, I have no idea what they
mean by a
12 brand's particular starter index.
13 Q. It will benefit us long term to develop
promotion
14 events that involve the young, and especially to
convince
15 the starter group to smoke Kool.
16 Do you see that?
17 A. I do see that.
18 Q. Now, it is your opinion to this jury that
whoever
19 wrote this was barking up the wrong tree, right?
20 A. I would not even go that far. I have no
idea what
21 this is supposed to mean and who wrote it, in
what context
22 it is. I've seen a lot of company documents and
this looks
23 like another one. But it would, it would not be
24 responsible for me to try to guess at what this
was or what
25 it's supposed to be. I don't recognize it.

3191
1 Q. But you don't believe that the tobacco
industry would
2 be spending its advertising and promotion
dollars well if
3 they tried to convince the starter group to
smoke Kool
4 because you don't think it can be done, right?
5 A. What's a starter group? I mean what is
this?
6 Q. Well, the starter group for cigarettes,
Professor
7 Henke, is teenagers; that's the one with ones
who starts
8 smoking?
9 MR. BERNICK: I object to the
testimony of
10 counsel.
11 THE COURT: Sustained.
12 BY MR. ROWE:
13 Q. According to you, the tobacco company
spent 5 billion
14 dollars a year on marketing solely for switchers
and

15 attracting or retaining their own customers?
16 A. Put it in reverse. It's primarily to
maintain the
17 brand loyalty, that is the biggest part.
18 Q. When you go to market cigarettes you
basically have
19 three potential target audiences; you have your
own smokers
20 of your own brand that you just talk about,
something what
21 they call the franchise?
22 A. Um-hum.
23 Q. You have people smoking other brands who
are referred
24 to as switchers if they will switch to your
brand, right?
25 A. Yes.

3192
1 Q. And then you have non-smokers are a
potential target
2 audience, which you would try to convince to
smoke your
3 brands or smoke cigarettes, and that's the ones
you are
4 saying advertising and promotions can't reach,
right?
5 A. Right.
6 Q. And that's what we call starters, that
group of
7 people who haven't started yet, they are
non-smokers, but
8 if they start to smoking your brand they are
starters?
9 MR. LERMAN: I object to the form of
that
10 question. That may be what counsel was to
mean.
11 THE COURT: I'm not sure it's an
appropriate
12 question.
13 BY MR. ROWE:
14 Q. Can we have an understanding, when I use
the word
15 starters I'm referring to people who have not
yet started
16 to smoke but who are now going to start smoking?
17 THE COURT: Why don't you try to
rephrase the
18 question.
19 MR. ROWE: Let's go to another
document, if we
20 could.
21 Q. This is Exhibit 2713-A, a 1984 memo from
the filings
22 of R. J. Reynolds written by one marketer to
another. It
23 says, in a very basic sense it dramatizes the
important of
24 repeat business as oppose the to switching. It
is
25 relatively easy for a brand to retain 18 year
old smokers

3193

1 once it has attracted them; conversely, it is
very
2 difficult to attract a smoker, it has already
been won over
3 by a different brand. There is a principle of
inertia, a
4 smoker at rest tends to stay at rest. Would you
agree with
5 that opinion?
6 A. Well, the difficulty in attracting a
smoker that has
7 already been won over by a different brand is
why I say the
8 secondary function of advertising is the
switching
9 function; primarily it's the brand loyalty, and
I think
10 that's consistent with what I see in that
sentence.
11 Q. But from what you see here, would you
agree that it
12 wouldn't make sense to spend 5 billion dollars a
year
13 trying to retain your franchise smokers when as
Mr. Nordine
14 says it's relatively easy to do?
15 A. That wouldn't make sense, no, not at all.
A mature
16 market, like cigarette advertising, occurs out
of
17 self-defense, if you don't advertise, you are
going to lose
18 your smokers to other brands.
19 Q. And at the same time, would it make sense
to spend 5
20 billion dollars a year chasing switchers when
it's very
21 difficult to get them?
22 A. No, I would say that the bulk of that
advertising
23 promotion expenditures is aimed at the current
smokers
24 brand.
25 Q. Have you ever undertaken studies to
determine whether

3194

1 the revenues generated by switching match or
come anywhere
2 close to the expenditures on advertising?
3 A. No, I haven't.
4 Q. And would you agree that for the industry
as a whole
5 switching isn't going to get the job done? In
other words,
6 if the industry, taken as a whole, keeps taking
each others
7 customers back and forth but never gets
replacement
8 smokers, over time they are not going to have
any business

9 left, are they?
10 A. I think you could say that about any
industry.
11 Q. So they need the starters, even if you say
that their
12 advertising and promotion can't reach the
starters, right?
13 A. That's right.
14 Q. They have an interest in having people
starting to
15 smoke, you are just saying that advertising and
promotion
16 isn't the way to get people to smoke?
17 A. No, what I'm saying is, they are at the
mercy of
18 those people who don't smoke. And those people
may or may
19 not decide to smoke.
20 Q. Are they at their mercy, or is it the
people who are
21 thinking about smoking that are at the mercy of
the tobacco
22 industry?
23 A. See, I think that's the fallacy, and it's,
I know
24 it's counter intuitive, but advertising is
simply not that
25 powerful.

3195

1 Q. Let's skip the next one and go to 3280.
2 This is a 1990 strategic plan for R.
J.
3 Reynolds. Do you see where R.J. Reynolds says
that
4 loyalty, not switching, is the major factor
driving any
5 tobacco company's business. That's the point,
you want to
6 keep your smokers smoking your brand, right?
7 A. Yes.
8 Q. And the third point is every brand and
company in the
9 cigarette industry on a long term growth trend
can trace
10 success to attracting first usual brand smokers,
right?
11 A. Yes, I see that.
12 Q. Okay. Now in your expert opinion, how do
you attract
13 first usual brand smokers if you don't use
advertising and
14 promotion?
15 A. I think you are talking about attracting
smokers, and
16 smokers will be interested in doing brand
comparisons.
17 Q. These aren't smokers, they are first usual
brand
18 smokers. How do you get someone to use your
product as
19 your first usual brand?
20 MR. LERMAN: Your Honor, I object to

counsel

21 testifying what these terms mean.

22 THE COURT: I think the questions

proper. So

23 I'll overrule the objection.

24 THE WITNESS: In response to your

question,

25 although I'm not sure exactly how you have

worded the

3196

1 question now, I would point to research that

shows that

2 smokers who begin smoking are not choosing

brands when

3 they initiate smoking, they don't have brand

preferences;

4 that brand preference increases as smoking

increases.

5 And, you know, I don't want to

speculate about

6 what this is, where it comes from, but I don't

see it an

7 inconsistency in what you just said to me and

what I have

8 said.

9 Q. When smokers begin smoking they don't

choose a brand;

10 is that what you said?

11 A. Well, I can point to some research and

anecdotal data

12 as well, that when people begin smoking, what

are some of

13 the terms in some of the depositions, OPB, Other

Peoples

14 Brand; what is available.

15 Q. So you are not saying they roll their own

cigarettes;

16 they smoke some brand?

17 A. I say they don't have a brand preference

as

18 established.

19 Q. And what you are saying in this document,

once they

20 get a brand preference, that's when RJR wants

them, but not

21 before?

22 A. No, that's not what I've said.

23 MR. WEBER: Object to that question.

24 THE COURT: I don't understand the

question.

25 MR. ROWE: I'll rephrase.

3197

1 Q. Do you know that a large portion of

today's cigarette

2 market is discount brands?

3 A. I would believe that.

4 Q. Would you accept Mrs. Beasley's testimony

that 30

5 percent of the market today is discount brands?

6 A. That's interesting.

7 Q. She said it was interesting, too, and you

think that
since kids
immediately.
kids? You
show you
advertisised, are
Marlboro, Camel
Newport?
A. That's probably true.
Q. Can we skip ahead to 18515, please, Keith.
And can you see at the bottom of the
page it
frequently
adolescents.
don't have 86
percent of the adult market, do they?
A. I don't know exactly what the percentage
of the adult
3198
have the
numbers for
share, overall
running at
Newport at
They are
are, as you
above, where
Camel and
would think.
most

8 discount brands might be appealing to kids,
9 don't have as much money as adults, right?
10 A. I'm not so sure I would agree with that
11 Q. You don't think price is a factor for
12 testified to that once before. You want me to
13 that?
14 A. No, you don't have to show me.
15 Q. But discount brands are not widely
16 they, compared to the name brands likes
17 Newport?
18 A. That's probably true.
19 Q. Can we skip ahead to 18515, please, Keith.
20 And can you see at the bottom of the
21 says Marlboro, Camel and Newport were the most
22 purchased brands for 86 percent of the
23 Now Marlboro, Camel and Newport
24 percent of the adult market, do they?
25 A. I don't know exactly what the percentage
1 market; Marlboro, Camel, Newport.
2 Q. It's 32, percent. We'll show you, can we
3 next one?
4 THE COURT: Do you have a question?
5 BY MR. ROWE:
6 Q. If you look at the chart you can see the
7 those cigarettes, in terms of adult market
8 market share is on the left column. Marlboro is
9 something like 28 percent; Camel at 4 percent;
10 4.7 percent. I guess my math is a little off.
11 not running anywhere near 86 percent as they
12 can see for the adolescent brand preference
13 they are 68 percent for Marlboro; 13 percent for
14 12 percent for Newport.
15 Do you see that?
16 A. Seems to be in the same rank order, I
17 Q. Actually not but?
18 THE COURT: Let's ask a question.
19 BY MR. ROWE:
20 Q. Which brands do you suppose were the three

21 heavily advertised brands in 1993 when Marlboro
camel and
22 Newport captured 9686 percent.Youth market while
only have
23 32 percent of the adult market?
24 A. I don't know.
25 Q. Well, the CDC tells us, the three most
commonly

3199

1 purchased brands among adolescents smokers were
the three
2 most heavily advertised brands in 1993,
suggesting that
3 cigarette advertising influences adolescents
brands
4 preference, you don't agree with that though, do
you?

5 A. No, I don't.
6 Q. That's the Center for Disease Control of
the United

7 States Government, is that right?
8 A. No, I don't disagree with them.
9 Q. Don't you think that backing off the
statistics that
10 it just makes sense that the brands you would
advertise

11 most heavily would appeal the most to kids?
12 A. The brands that are advertised the most
heavily are
13 also the ones that are most likely to be found
in your
14 house and among friends.
15 Q. The ones that are most likely to be found
among your

16 house or among your friends are the ones
according to their
17 overall market share, it is not their
advertising that
18 causes them to be in your house. You told us
advertising
19 doesn't affect people's purchasing patterns,
right?

20 MR. LERMAN: Object to the form.
21 THE COURT: You need to ask a
question.

22 BY MR. ROWE:
23 Q. You have kids yourself?
24 A. I sure do.
25 Q. And when you take them to the mall no
matter how hard

3200

1 you try to convince them to buy converse, they
want the Air
2 Jordan's, right?
3 A. Not necessarily.
4 Q. Kids are very brand conscious, aren't
they?
5 A. Yes, they are.
6 Q. And you don't think it makes sense that
the brands
7 that advertise the most heavily are the ones

that kids have
8 86 percent of the market for those three brands?
9 A. Well, is there -- are you talking about
market share,
10 where there is a reduced number of brands that
are being
11 used to determine market share?
12 Q. That's market share statistics for all
brands. They
13 have 86 percent of the market, even though all
of those
14 discount brands are out there, kids buy those
three brands
15 86 percent or rather smoke them 86 percent of
the time.
16 That's what the Center for Disease Control says.
17 And that opinion is inconsistent
with your
18 opinion, isn't it?
19 A. I don't think it necessarily is.
20 Q. Let's go to Exhibit 2692, if we could,
Steve.
21 This is a 1984 RJR strategic
research report
22 marked "secret", written by Diane Burrows.
23 If we could look at page 2. If we
could go to
24 the middle of the page. In fact just a little
further
25 down.

3201
1 This is page one, can we go to the
next page?
2 Well, let's move on.
3 Can we get to 1871?
4 THE COURT: Do you have a copy?
Could we use
5 the Elmo instead of doing this?
6 Okay. Let's get a question. You
are at 1871,
7 or you were.
8 MR. ROWE: Do we have 1871?
9 Q. This is a Lorillard memo from 1978.
10 See if you can zoom in, Steve.
11 See where it says, "the base of our
business is
12 the high school student"?
13 A. Yes, I do see that.
14 Q. Do you have an opinion about whether
that's -- I
15 think you were asked on direct examine whether
that would
16 be right or wrong. Do you have an opinion
whether that is
17 right or wrong for Lorillard to say that the
base of their
18 business is the high school student?
19 A. I don't think that's very right, if that's
what
20 they are doing.
21 Q. Next exhibit, 1386.
22 This is an RJR memo from 1975 that

says: To
23 increase our young adult franchise, that's
their marketing
24 objective -- and then they define young adult
franchise
25 for you as the brand -- must increase its share

3202
1 penetration among the 14 to 24 age group which
have a new
2 set of more liberal values and which represent
tomorrow's
3 cigarette business.
4 Do you have an opinion as to whether
that is
5 right or wrong?

6 MR. LERMAN: Your Honor, I object to
the form.

7 THE COURT: Sustained.
8 BY MR. ROWE:
9 Q. Is it your opinion that when R. J.
Reynolds said they

10 were going to have a marketing objective of
increasing it's
11 share penetration among 14 to 24, that what they
were going
12 after were 14 year old switchers?

13 MR. LERMAN: Your Honor, again I
object.

14 THE COURT: Overruled.
15 THE WITNESS: You know this is a

document that
16 you have told me that is from a strategy plan.

I don't
17 know who wrote it, if they are going after the
14 to 24

18 year olds, I don't approve of that. But I
don't know

19 where this document comes from and, you know,
I've worked
20 in industry and a lot of people write a lot of
documents,

21 a lot of letters that aren't necessarily acted
upon or

22 even important. So I can only speculate about
what this
23 is and what it represents.

24 Q. And what if it gets presented to the Board
of

25 Directors, do you thin think it is then an
important

3203
1 document?
2 A. What do the Board of Directors do with it?
3 MR. LERMAN: I object. Again, not

only to the
4 form of the foundation, this witness is
unfamiliar with

5 company documents, she so testified.
6 THE COURT: Well, I understood the

line of
7 questioning and I think it's admissible.

8 I wish you would focus on cross
examination
9 part.
10 MR. ROWE: I will your Honor, if we
could skip
11 to the next document and then go to 2279.
12 Q. This is a Philip Morris document at the
top of the
13 page you can see that the author Myron Johnston
has
14 written, it is important to know as much as
possible about
15 teenage smoking and attitudes. Today's teenager
is
16 tomorrow's potential regular customer, and the
overwhelming
17 majority of smokers first begin to smoke while
still in
18 their teens.
19 Now when he uses the word "today's
teenagers"
20 do you have an understanding whether that is a
smoker, is
21 that a teen smoker we are talking about?
22 MR. LERMAN: Your Honor, I object.
23 THE COURT: Sustained. She can't
know what he
24 means.
25 How much more do you have on this?

3204
1 MR. ROWE: I have a fair bit more.
2 THE COURT: We'll take the lunch
break. We'll
3 stand in recess until 12:35, then be back in
the jury room
4 at that time. So take about 35 -- actually
12:40 today.
5 Would the attorneys approach.
6 (The following discussion was
conducted at the
7 side bar between court and counsel, out of the
hearing of
8 the jurors, as follows:)
9 THE COURT: I think there is some
sense to the
10 hypothesis that advertising affects smoking, I
think there
11 is some relevance to ask about company
documents, but I
12 don't want you to go through all of them.
13 MR. ROWE: No, actually we just have
four or
14 five more I want to use.
15 THE COURT: I think you are just
putting these
16 up, you aren't asking whether it accords with
her theory
17 or not accords with her theory.
18 MR. ROWE: I appreciate that, your
Honor. The
19 ones I have will be directly to her theory.
20 THE COURT: Well, I don't want to

keep fumbling
21 through these as well. Why don't you narrow it
down the,
22 if you think some particularly is disconsolate
with her
23 theory, go through it. Let's not be fumbling
any more
24 through these generalized documents.
25 MR. ROWE: I will do that.

3205
1 MR. WEBER: Can I make two more
points.
2 I was biting my tongue about
cumulative
3 objections. We are seeing the same stuff all
over.
4 THE COURT: The worst part is there
is not even
5 questions on them.
6 MR. WEBER: Secondly, we have to do
something
7 with the Elmo. They are slapping documents up,
flipping
8 through pages, no questions, showing
highlighted things.
9 There is no record of it and it is just not
right.
10 THE COURT: There has been some
fumbling
11 through, so try to get the parts you are going
to go
12 through in order. If you need to change the
order, change
13 the order.
14 Let's try to get something that is
directly
15 related to the cross examination of her theory
that
16 advertising does not have an effect upon the
initial
17 decision on what brand to smoke or whether to
smoke.
18 MR. ROWE: Very good.
19 - - -
20 (Luncheon recess.)
21
22
23
24
25

3206
1 MONDAY AFTERNOON SESSION, MARCH 8,
1999.
2 THE COURT: If the jury will retake
their seat,
3 I'll ask counsel to continue cross examination.
4 MR. ROWE: Thank you, your Honor.
5 Professor Henke, on direct
examination you
6 testified that the major influences on children
beginning

7 to smoke, in your opinion, were peers and
parents, right?

8 A. Yes.

9 Q. Family and friends?

10 A. Yes.

11 Q. And you yourself have written that peer
pressure can

12 be manipulated by advertising, haven't you?

13 A. I may have done that in a certain study.

14 Q. Back in 1978 before you were employed by
the tobacco

15 industry?

16 A. And before I wrote my dissertation, yes.

17 Q. A study called black and white children
perceptions

18 of television commercials?

19 A. Yes.

20 Q. And do you remember writing apparently in
some cases

21 advertisers approach children with a more subtle
approach,

22 and then you were contrasting an adult
commercial for

23 McDonald's and a children commercial, right.

And you said,

24 for example, the adult, in the adult commercial
price

25 consciousness was clearly the stated objective,
while in

3207

1 the children's commercial the purpose was more
nebulous. A

2 good time was the focus of the commercial, and
being at

3 McDonald's clearly facilities that. It had
comradery peer

4 acceptance and fun, do you remember writing
that?

5 A. Yes, I do.

6 Q. Do you remember writing for children who
have not

7 learned the purpose of commercials and not aware
that

8 puffery is part of the game, the implications
are

9 substantial. They may come to expect that
consumption per

10 se leads to happiness, peer acceptance and
11 self-fulfillment. Do you remember writing that?

12 A. Yes, I do. And that's very reflective of
the

13 thinking at the time prior to 1980.

14 Q. No longer your thinking?

15 A. No. In fact, what that is based on is the
assumption

16 that children don't understand advertising and
the intent

17 of advertising. And in 1980 is, when I
developed the

18 non-verbal methodology, really, my thinking
changed

19 completely at that point.

20 Q. And so today you don't believe that
advertising and
21 promotions can impact peer pressure, right?
22 A. I believe that children are a lot smarter
than we had
23 previously been giving them credit for.
24 Q. My question is, today, do you believe that
25 advertising and promotions can impact peer
pressure?

3208

1 A. No, the peer pressure is distinct.
2 Q. Reaching that opinion, did you review
tobacco
3 industry internal documents to see whether those
people who
4 administer the 5 billion dollar a year
advertising budget
5 for promotions budgets believe different than
you do?
6 A. I have seen documents, but that's not the
focus of my
7 being here.
8 Q. Clearly, you have an open mind and you
would want to
9 see documents if the tobacco industry beliefs
contrary to
10 your opinion that peer pressure can be impacted
by
11 advertising and promotion?
12 A. Well, what the tobacco industry believes
is not an
13 indication of what the effect of tobacco
advertising and
14 promotion is.
15 Q. And so you would say that from your
perspective, as a
16 professor of marketing in New Hampshire, you
know more
17 about what works in the marketplace than the
people who
18 administer 5 billion dollars a year in
advertising
19 promotions?
20 A. I don't know those people, I haven't done
any
21 comparisons. I'm not making that claim.
22 Q. And you didn't undertake any study of
internal
23 documents?
24 A. No formal study, not at all.
25 Q. You didn't go to the Minnesota depository
and see the

3209

1 39 however million documents there?
2 A. No.
3 Q. Could we look at Exhibit 2995, please.
Zoom in on
4 the big paragraph.
5 This is a 1986 memo from RJR in
which RJR
6 marketing person expressed the view that

overall Camel
acceptance
smokers to
developed
that by
project an
their
at all?
advertising can
In my view.
pressure at all?
advertising
why someone
directed
motivation for
advertising

7 advertising will be directed toward using peer
8 influence to provide the motivation for target
9 select Camel.
10 Specifically, advertising will be
11 with the objective of convincing target smokers
12 select go Camel as their usual brand they will
13 image that will enhance their acceptance among
14 peers. Does seeing that influence your opinion
15 A. It doesn't change my opinion at all.
16 Q. It doesn't change your opinion that
17 impact peer pressure?
18 A. This doesn't speak to that issue at all.
19 Q. Doesn't speak to the issue of peer
20 A. It doesn't speak to the effect of
21 affecting peer pressure.
22 Q. Is there a reason you can offer the jury
23 would think that Camel advertising should be
24 toward using peer acceptance to provide the
25 smokers to select Camel if they didn't think
advertising

3210
smokers, and
something
campaign
clearly.
a 1985
With
this with
admitted.
Honor?
conducted at the
hearing of

1 and promotion could affect peer pressure?
2 A. Well, what I see here is a reference to
3 a peer acceptance and influence appeal would be
4 that you might test as a campaign approach, as a
5 appeal, I mean. This is talking about smokers,
6 Q. Let's skip ahead, Steve, to 2953. This is
7 Philip Morris presentation to Amish Maxwell.
8 MR. LERMAN: Your Honor, I object.
9 respect to this document I think I've discussed
10 the court before.
11 MR. ROWE: My notes reflect this was
12 MR. LERMAN: Can I approach, your
13 THE COURT: Yes.
14 (The following discussion was
15 side bar between court and counsel, out of the
hearing of

16 the jurors, as follows:)
17 THE COURT: What document is it?
18 MR. LERMAN: Your Honor, this
presentation.
19 That Amish Maxwell.
20 THE COURT: Who's Amish Maxwell.
21 MR. LERMAN: He's the former top
executive at
22 Philip Morris. This is a document, a
presentation by an
23 ad agency to Maxwell. This is not a Philip
Morris
24 document. It is not reflective of Philip
Morris
25 advertising, it is not an agency that Philip
Morris hired.

3211

1 And to present this, again --
2 THE COURT: This will be for --
3 MR. LERMAN: We believe this is
where they talk
4 about how we need to shake things up, we need
to stir
5 things up, the advertising isn't reaching
people. And
6 they made some recommendation to Philip Morris.
7 MR. ROWE: Our information is that
this was
8 prepared, it was done, it's Philip Morris's
chief
9 executive officer.
10 THE COURT: How much more are you
going to do?
11 MR. ROWE: Not very much.
12 THE COURT: Is this the last one?
13 MR. ROWE: There is one more after
this.
14 THE COURT: What is it?
15 MR. ROWE: Peer pressure, these are
directly on
16 the issues she testified.
17 THE COURT: Okay.
18 MR. LERMAN: Your Honor. Counsel
has been
19 introducing a the documents with some factual
preface as
20 to what they are, right now he is saying this
is a Philip
21 Morris document. I don't think that, I don't
think, not
22 only do I not think it's established, it's not
true.
23 THE COURT: Be careful in how you
are
24 describing it. If you have an objection to the
25 description, raise it, and if it needs
corrected I'll

3212

1 correct it, or you can correct it.
2 (The following proceedings were
conducted in

3 open court.)
4 BY MR. ROWE:
5 Q. For the record, Professor Henke, this
document which
6 I identified as a presentation may have been an
advertising
7 agency's presentation to Philip Morris's chief
executive
8 officer.
9 The top line says, Newport is
particularly
10 attractive to very young smokers. Because of
its emphasis
11 on peer group acceptability.
12 Very young smokers. Newport is
particularly
13 attractive to very young smokers because of its
emphasis
14 on peer group acceptability.
15 Does that impact your opinion about
whether or
16 not advertising and promotions can be used to
impact peer
17 pressure and create an environment where your
product is
18 being purchased by the young?
19 A. No. This says nothing to me about the
effect of this
20 advertising. I don't know actually what context
this paper
21 comes in, I'm, you know, I would be speculating
with you
22 about how it was used or what they mean by these
things. I
23 do see that they are talking about smokers
again. But
24 beyond that, I'm at a loss to tell you what this
means or
25 what it's for.

3213
1 Q. Let's skip ahead to 3956.
2 This is an exhibit called a Camel
named Joe,
3 and if we can go to the first ad.
4 In your opinion, as an expert, in
marketing
5 and --
6 MR. WEBER: Your Honor, I object.
Can I
7 approach on this just briefly. This document
has not been
8 in front of the court.
9 THE COURT: Pardon me?
10 MR. WEBER: This issue has not been
in front of
11 the court yet.
12 THE COURT: Well, I think he can ask
the
13 question. I'll overrule. I want to try to
move this
14 along.
15 MR. WEBER: But I think he referred

to this as
16 an ad, maybe I misheard.
17 THE COURT: Okay. Do you know if it
was
18 actually used?
19 MR. COUGHLIN: It's out of a total
exhibit
20 book, and so, when it's run it's run with the
warning,
21 Surgeon General's warning. I think that's Mr.
Weber's --
22 MR. WEBER: This is a page from a
picture page
23 of a coffee table book.
24 THE COURT: Make that clear in your
question.
25 BY MR. ROWE:

3214
1 Q. Assuming that this ad ran as depicted,
with the one
2 change, that when it ran as an ad it had the
Surgeon
3 General's warning somewhere in the ad, would it
be your
4 expert opinion, in the area of marketing and
children's
5 reactions to ads, that this would or wouldn't
create a
6 feeling among children that this product could
lead to per
7 acceptance?
8 A. Actually, in terms of my expert opinion,
there is
9 research with teenagers that shows that
teenagers are able
10 to identify the message that's intended and, in
some cases,
11 talk about specifically the Joe Camel ads, with
regard to
12 the intent of conveying the message of a cool
guy with cool
13 friends and so forth.
14 When those same people are asked
whether they
15 relate to the message or they relate to the ad,
they are
16 very up front in saying this has nothing to do
with me. I
17 understand the message, it doesn't affect me.
18 Q. Would you agree that the message of this
ad is grab
19 one of these Camels and you can step right into
this great
20 looking gang?
21 A. No, I would say the message of any add
lies within
22 the receiver of that message, not in the content
of the ad.
23 Q. You testified on direct examination and
you showed a
24 couple charts about the zero percent response of
people who

25 were asked what effect adds had on making them
smoke. Do

3215

1 you remember those charts?
2 A. Yes.
3 Q. Are you aware of studies showing that
people tend to
4 underestimate the effect of advertising on
themselves?
5 A. Actually, I'm aware of something a little
bit
6 different from that, which is called the third
person
7 effect. And it's a -- the case where people,
and I think
8 we all do this, can accurately assess how we
have been
9 affected by advertising. But we tend to think
that other
10 people are not as smart as we are or not as well
equipped
11 as we are to handle the advertising. And that's
called a
12 third person effect.
13 And with children, that was an
especially
14 important concern, because the thinking was
that children
15 are he especially vulnerable to advertising
because they
16 don't understand what the intent of the
advertising is.
17 But as I said, since 1980, with new methods of
18 interviewing children, that thinking has
changed as well.
19 Q. But you are not aware of studies
suggesting that
20 people themselves underestimate the effect of
21 advertisements on themselves?
22 A. No.
23 Q. You are not aware of Professor Arnett's
work in that
24 area?
25 A. I believe Professor Arnett is not in
marketing, has a

3216

1 different field of interest.
2 Q. So your answer is you are not aware of
that work?
3 A. I'm not aware of a specific study that you
are
4 referring to, no.
5 Q. Now, you know that the Camel campaign --
and the same
6 point applies to this, this ad -- that when it
ran would
7 have had the Surgeon General's warning on it,
but you are
8 aware of the Camel cash concept that was
instituted in
9 1992?

10 A. I'm familiar with that, yes.
11 Q. And you express the opinion on direct
examine that in
12 some instances you would look at the falling
rate of
13 cigarette consumption versus the rising rate of
money being
14 spent on promotions and ads, and you drew some
inferences
15 from that, right?
16 A. Yes, that there was no one to one
correlation between
17 the two.
18 Q. Are you aware at the time Camel Cash was
introduced
19 as a promotion, the share of children's market
for Camel
20 began to rise dramatically and so the did the
rate of young
21 people smoking in this country?
22 A. No, I'm not aware when Camel Cash came
out.
23 Q. As you look at this as an expert in
marketing, do you
24 think this has any appeal to children?
25 A. I haven't tested the appeal of this. It's
hard for

3217

1 me to say what will appeal to children.
2 Q. You have done no testing about whether
Camel Cash
3 appeals to children or to adults, have you?
4 A. No, I have not done any primary research
on that.
5 Q. In fact, you offered the opinion you think
Joe Camel
6 is not only not attracting kids, you think he
turns off
7 kids, don't you?
8 A. Based on just the kids that I spoke to,
there is a
9 group certainly who are not convinced by Joe
Camel that the
10 product category is good.
11 Q. They still say he's a bad guy, right, old
Joe is a
12 bad guy?
13 A. I've seen some of those.
14 Q. And so you think RJR even though the
public health
15 community was critical of RJR, you actually
think they made
16 a mistake putting old Joe out if they were
trying to
17 attract kids?
18 A. I don't think I drew that conclusion, no.
19 Q. You wouldn't go so far to say he was an
anti-smoking
20 ambassador, do you?
21 A. No, I don't believe I would put him in
that category.
22 Q. But you don't think Joe Camel had any

impact on kids

23 smoking in this country?

24 A. Oh, I'm sorry, no, on initiation, and I
think we have

25 looked at all that.

3218

1 Q. Right. Did you indicate you were or were
not aware

2 of Professor Arnett's studies?

3 A. I'm not.

4 Q. This is a graph from one of Professor
Arnett's

5 studies where he asked the one -- instead of
asking whether

6 Joe Camel is good or bad or smoking is good or
bad, he

7 said, do you think the ad makes smoking more
appealing?

8 You see the answers for smokers and non-smokers
was

9 generally --

10 MR. WEBER: I object on lack of
foundation. It

11 is not a proper question.

12 MR. ROWE: I'll rephrase it.

13 Q. Would knowing that the results of
Professor Arnett's

14 study showed that Joe Camel made smoking more
appealing to

15 the respondents, would that influence your
opinion about

16 whether cigarette advertising could cause people
to start

17 smoking?

18 MR. WEBER: Same issue under 803,
your Honor,

19 no foundation.

20 THE COURT: I think it is admissible
under

21 803.18, so I think there was testimony from
other

22 witnesses that would lay a foundation that this
could be

23 relied on. Go ahead and answer.

24 THE WITNESS: I think that -- I want
to point

25 out with this question, that what you are
looking --

3219

1 THE COURT: Just try to answer the
question.

2 Why don't you rephrase the question.

3 BY MR. ROWE:

4 Q. Would it affect your opinion that
advertising and

5 promotions do not cause people to start smoking,
if you

6 knew that Professor Arnett had done a study in
which he

7 asked children, do you think the ad makes
smoking more

Camel was
non-smokers
opinions.
know that
introduced,
Cash?
There is no
question.
next exhibit.
rise in
one, no.
from the
referenced in
graders

8 appealing, and the response he got was that Joe
9 the one that people thought, both smokers and
10 thought made it most appealing?
11 A. No, it wouldn't affect my decision, and my
12 Q. And it doesn't affect your decision to
13 smoking rates went up right after Joe Camel was
14 and particularly with the introduction of Camel
15 MR. LERMAN: I object, your Honor.
16 foundation for the factual predicate in that
17 MR. ROWE: Okay. Let's go to the
18 Q. Have you ever seen these statistics on the
19 smoking for 8th graders and 10th graders?
20 A. I'm not sure I've seen this particular
21 Q. This is a monitoring of the future study
22 University of Michigan and that Mrs. basely
23 her direct examination?
24 A. Yes.
25 Q. You see the rise for 8th graders and tenth

3220

'91?
it is.
examination that
advertising was
draw an
10th graders
roughly before
and draw
market share
object to this
foundation for

1 began approximately 1990, somewhere around '90,
2 I'm sorry?
3 A. Well, it appears to be close to that, yes,
4 Without seeing the data points, I don't know.
5 Q. Now, you showed the jury on direct
6 when smoking consumption went down and
7 going up you drew inferences from it. Do you
8 inference from the rise of smoking of 8th and
9 in correlation that Joe Camel was introduced
10 that?
11 A. No, I would not look at one ad campaign
12 conclusions based on a correlation.
13 Q. This demonstrates the rise in Camel's
14 among youth?
15 MR. WEBER: Your Honor, I would
16 chart. I don't think there is an adequate
17 it as to what the sources are.
18 MR. ROWE: The sources are indicated

on the

19 charts prepared by Professor Arnett. It's
partly based on
20 his own surveys that he testified on in this
court.

21 THE COURT: I will overrule the
objection, upon
22 the representation that the sources, as listed
as being
23 the Center for Disease Control, and upon
counsel's
24 representation to that effect.

25 MR. ROWE: Thank you, your Honor.

3221

1 Q. Assuming that this data were correct,
would this
2 influence your opinion that advertising has no
impact on
3 children starting to smoke?

4 A. That would not influence my opinion. I
would want
5 more information about the view in-between, and
want to
6 know how these data were drawn from the CDC
figures by Dr.

7 Arnett.

8 Q. You want this jury to believe that the
consensus of
9 professional opinion in your field is that
advertising does
10 not work to convince people to start smoking,
right?

11 A. Yes.

12 Q. And you put up the graphic that showed a
lot of small
13 print writing from a lot of different sources,
right?

14 A. Yes.

15 Q. Okay. So I'm sure it will come as no
surprise to you
16 that we have also got a graphic with a lot of
small print
17 writing. If we could go to the upper left hand
corner
18 first?

19 MR. LERMAN: Your Honor, this is an
exhibit
20 that has not be disclosed to the defense in
preparation
21 for Dr. Henke's testimony.

22 MR. ROWE: That is not true. It got
sent over
23 with all the other material. It got sent over
last week.

24 MR. LERMAN: I won't quibble, your
Honor, I'll
25 take counsel's representation.

3222

1 BY MR. ROWE:

2 Q. You see in the upper left corner we have
Dr.

3 Pierce's, the study you testified about, the
February, 1998
4 study?
5 A. That's right.
6 Q. That's the longitudinal study?
7 A. That's right.
8 Q. And you agreed before this study came out
you
9 yourself had expressed the opinion that the way
to get at
10 the question of whether advertising and
promotions caused
11 kids to start smoking was to do a longitudinal
study,
12 right?
13 A. It would take more than simply conducting
a
14 longitudinal study there are ways to develop
measures
15 within those longitudinal studies and the
methodology would
16 be very important.
17 Q. But you yourself have testified that a
longitudinal
18 study is necessary to address the question,
right?
19 A. Yes, I have. But doing a longitudinal
study, which
20 would repeat bad measures in a second wave would
be a bad
21 longitudinal study; a longitudinal study which
would start
22 with valid measures and repeat them would be a
better
23 longitudinal study. There are many kinds of
longitudinal
24 studies, so my point is, yes, that would be a
requirement
25 ideally for an assessment of children's
perceptions and

3223

1 changes, but it's not the only plan.
2 Q. When you say a bad measure, that's your
opinion,
3 rights?
4 A. I'm, I'm explaining that there are many
different
5 ways to do longitudinal studies, that's not the
only
6 requirement.
7 Q. Let's talk specifically about Dr. Pierce's
study. I
8 though your opinion is that he used bad
measures, right?
9 A. I have some concerns with the measures
that he's used
10 in the study, yes.
11 Q. You can't point this jury to any published
opinion by
12 anyone other than yourself that Dr. Pierce used
bad
13 measures, can you?

14 A. Nothing's published and I haven't
published anything
15 about it either. This came out in February of
1998.
16 Q. And you don't pretend to be an
epidemiologist?
17 A. No, I certainly don't.
18 Q. You don't intend to be a medical doctor
like Dr.
19 Pierce?
20 A. That's right.
21 Q. You didn't work for the Surgeon General
like Dr.
22 Pierce did?
23 A. No, I never did.
24 Q. Your work has not been peer reviewed by
the Journal
25 of the American Medical Association like this
study was?

3224
marketing
1 A. No, my work would be peer reviewed by
2 experts.
3 Q. And yet you come into court and say Dr.
Pierce used
4 bad measures so the jury should ignore this
study, when
5 you, it is exactly the study you said need to be
done to
6 address the question.
7 MR. LERMAN: Your Honor --
8 THE COURT: It's been asked and
answered.
9 BY MR. ROWE:
10 Q. Now, you told the jury Dr. Pierce didn't
control
11 adequately for peer pressure or family
influence, right?
12 A. Yes.
13 Q. You said you reviewed Dr. Pierce's data.
Did you
14 review this chart, relating to Dr. Pierce's
work, that
15 shows that he controlled for familial smoking
and peer
16 smoking and still found that exposure to tobacco
promotion
17 and advertising influenced people on the road to
addiction?
18 Did you review this?
19 A. If this is in the study I have seen it,
yes.
20 Q. But you say that he didn't control for
peer smoking
21 and family influence, right?
22 A. That's right.
23 Q. You say that even though you are not an
24 epidemiologist or medical doctor, right?
25 A. Yes, I don't think that I --

3225

1 Q. Now, we talked about Dr. Jackson before.

2 Can we go to Exhibit 4690. If we
can go to the
3 right hand column.
4 This Dr. Jackson, you agreed, is a
respected
5 researcher?
6 A. Yes.
7 Q. You cited her 10 times in your report?
8 A. Yes.
9 Q. She talks about that peer study and she's
talking
10 about the one we just looked at, right?
11 A. She refers to it, yes.
12 Q. She doesn't just refer to it, she says the
result is
13 noteworthy and she does not criticize it as
having bad
14 measures, does she?
15 A. Well, in fact, the point of this article
of Dr.
16 Jackson's is to attempt to refine his measure of
17 susceptibility.
18 Q. Is that a criticism?
19 A. It is an attempt to improve upon, to
refine and to
20 validate a more precise measure of
susceptibility.
21 Q. She tries to take his work and move
forward from it?
22 A. With some changes, with some refinements.
23 Q. And you wouldn't do that if you were
basing it on bad
24 work, would you?
25 A. Well, in --

3226
1 Q. Can we go to 194, please, can we go to the
lower left
2 hand corner this time.
3 Now, you cited something from the
Federal Trade
4 Commission which was written before Dr.
Pierce's study,
5 this is from the FDA, and also is before Dr.
Pierce's
6 study, it says the "FDA finds that's
international
7 experience -- that's what you were testifying
about on
8 direct examination -- with our countries
provides
9 empirical evidence that restrictions on tobacco
10 advertising when given appropriate scope and
when fully
11 implemented, will reduce cigarette and
smokeless tobacco
12 use among children and adolescents under the
age of 18.
13 That's part of the literature, isn't
it?
14 A. That's part of the USDA literature.
15 Q. So now when you put that chart up about
all the

and peer 16 opinions that advertising is not the real factor
influence is, you didn't choose this one, right?
18 A. No, because the Federal Trade Commission
is the 19 agency that regulates advertising and regulates
tobacco 20 specifically.
21 Q. So what the FDA has to say about it is
totally out in 22 left field?
23 A. I think maybe we should look at the
context in which 24 the FDA was writing about.
25 Q. Was the context in which they were writing
about

3227
having 1 shortly after they criticized your 1998 study as
results? 2 inadequate sample size and not generalized
limitations and 3 A. I'm not sure when they took those
4 discuss them as I did in my study.
5 Q. Next, please. You mentioned the 1989
study from New 6 Zealand. If we could go to the lower right hand
corner,
7 please.
8 This study that you testified about
on direct 9 examination, what it found was that the
findings from this 10 study show unequivocally that tobacco
consumption and use 11 at different ages can be effectively increased
by 12 government policies which ban tobacco promotion
and raise 13 tobacco prices, right?
14 A. That's right.
15 Q. If we can go to the next exhibit please.
16 This is the curve you testified
about on direct 17 examination, right?
18 A. Yes.
19 Q. Now, you know that the regression analysis
that was 20 done demonstrated the opposite conclusion from
the one you 21 expressed to the jury, right?
22 A. If this is the result of the regression
analysis 23 which indicates that with an increase in
advertising 24 control there is a decrease in consumption, then
yes.
25 Q. And you didn't gather the data from New
Zealand in

3228

1 order to determine if they did the regression

analysis

2 properly or improperly, did you?

3 A. No, I did not.

that

4 Q. But you still quarrel with their finding

5 advertising control correlates to tobacco
consumption, is

6 that right?

7 A. Yes, I do.

8 Q. Can you go all the way to the end, Steve,
to 186.

9 No, let's go to 192.

10 What you have here is, on the left
side, your

11 own words from 1978, and the right side your
own words

12 from your report in this case. What you said
in 1978 was

13 that without the ability to understand the
manipulative

14 and bias approach taken by advertising,
millions of

15 younger black children may well be very
vulnerable to the

16 influence of commercials.

17 You also said, apparently the
frequency and

18 length of exposure to commercials are not
nearly enough to

19 increase awareness and understanding of what
commercials

20 try to do and how they try to accomplish their
objectives.

21 That's what you published in 1978,
isn't it?

22 A. Absolutely.

23 Q. And today what you are telling the jury is
that

24 advertising and promotion play no role in the
decision to

25 take up smoking or the decision to continue to
smoke, no

3229

1 role whatsoever, right?

2 A. That's right.

3 Q. And in-between those two publications what
happened

4 was you were hired by the tobacco industry,
isn't that

5 right?

6 A. Well, actually this is a very good
illustration of

7 something else that happened in-between the time
that was

8 published and the time the recent piece was
published. And

9 that is, that I entered graduate school, I
learned a great

10 deal more about the discipline, I developed a
non-verbal

11 methodology which I use to assess children's
perceptions.

12 And since 1980, because these are pre-1980, I
have had a
13 different opinion and it's been reflected in my
work since
14 1980.
15 Q. And you have held that opinion even though
in 1998
16 Dr. Pierce came a long and published exactly the
study you
17 are saying has been needed, a longitudinal study
to show
18 whether advertising may affect children and
smoke. You are
19 going to hold that opinion on what is presented
to you?
20 MR. LERMAN: I would object, your
Honor.
21 THE COURT: Sustained.
22 MR. ROWE: Thank you, no further
questions.
23 REDIRECT EXAMINATION
24 BY MR. LERMAN:
25 Q. Doctor Henke, did your opinions change
from your

3230
1 pre-doctorate work to your doctorate work
because the
2 tobacco company was paying you money in 1980?
3 A. No.
4 Q. And the suggestion that your opinions
today are
5 different than your opinions before you were
hired by the
6 tobacco companies to do consulting work, is that
suggestion
7 true or false?
8 A. That's false.
9 Q. And did the tobacco companies contact you
when they
10 became aware of your work, is that how your
relationship
11 with the companies began?
12 A. Yes.
13 Q. Which came first, the contact from tobacco
or
14 publication of your work?
15 A. Publication of my work.
16 Q. Now, we talked about counsel showed you
something
17 about the New Zealand study, do you recall that?
18 A. Yes.
19 Q. Could we get that straight line chart put
up, please?
20 And by the way, before I get the to
this, it's
21 really my mistake, I've been talking about you
being hired
22 by the tobacco companies. Who do you work for?
What is
23 your profession?
24 A. I'm a tenured professor of marketing at
the

25 University of New Hampshire.

3231

1 Q. You do consulting work for the tobacco
companies?
2 A. I do work for them, I do consulting work.
3 Q. Taking a look at this chart that's been
put up here,
4 counsel is saying some regression analysis has
been done to
5 draw that line. Does it look to you as though
that line
6 fits those data points closely?
7 A. It's very difficult for me to see that
that line is
8 the best fit for those data points.
9 Q. Now let me ask you this, on the axis that
says
10 advertising control on a scale of one to 10, do
you know
11 what factors went into somebody deciding whether
control
12 was a 3, a 6, a 9?
13 A. No.
14 Q. Do you know of any established scale that
rates
15 advertising control on a 1 to 10 basis?
16 A. No.
17 MR. ROWE: Objection, lack of
foundation.
18 Q. Let me ask you this, on the bottom it
says, tobacco
19 consumptions, kilogram per adult?
20 A. Yes.
21 Q. Is that how tobacco consumption is
measured in the
22 United States; kilogram per adult?
23 A. No, it's not.
24 Q. Do you know why that measure was used on
this chart?
25 A. I believe it may have something to do with
the study

3232

1 in Norway, which has shown that since the ad ban
the
2 consumption of brand name manufactured
cigarettes has
3 increased.
4 And those who argue that the ad ban
has been
5 effective would rather talk about consumption
in terms of
6 kilograms per adult because then they can
include tobacco
7 that's used for hand rolling cigarettes,
because that
8 tobacco consumption has decreased since the ad
ban, so.
9 Q. Okay. Now, do you know what is meant by
the fit of
10 a line, an R squared value?
11 A. Well, these are estimates of the best

line, the best
12 fit for a data set, and the amount of variance
that would
13 be explained by it.
14 Q. What kind of fit, in your work, do you
look for when
15 you get the R squared value? What kind of
number do you
16 look for?
17 A. Well, it depends on what the study is, but
the R
18 squared is going to tell you what amount of
variation is
19 explained by the regression or the --
20 Q. Okay, and can you tell by looking at this
line what
21 the R squared is?
22 A. No, I would have no way of even guessing
in that
23 case.
24 Q. Now, where it says, on the bottom axis
where it says
25 3.5 kill grams per adult?

3233
1 A. Yes.
2 Q. Can you take your eye and move up the
graph, do you
3 see multiple points that seem to line up with
3.5?
4 A. I do.
5 Q. Is that suggestive to you that you could
draw a
6 straight line straight down from Iceland to
Japan
7 basically?
8 MR. ROWE: Objection. She said she
couldn't
9 even figure out.
10 THE COURT: Sustained.
11 BY MR. LERMAN:
12 Q. Are you aware that this graph came from
that New
13 Zealand study?
14 A. Yes.
15 Q. And are you aware of the treatment, was
that New
16 Zealand study used in litigation in Canada?
17 A. Yes, it was, in fact.
18 Q. And was it submitted to a court in Canada?
19 A. Yes, it was.
20 Q. And are you aware of the reception that it
got by the
21 court in Canada?
22 MR. ROWE: Objection, hearsay.
23 THE COURT: Sustained.
24 If you start down that line, I may
be quoted
25 someplace else.

3234
1 MR. LERMAN: Can we get the Arnett
study up,

2 please?
3 Q. You remember you were asked about this
particular
4 study on cross examination?
5 A. Yes.
6 Q. All right. And you also talked about
third person
7 effect?
8 A. Yes.
9 Q. Can you explain or interpret this result
in light of
10 what you have testified to about third person
effect?
11 A. Well, when a person is asked, do you think
the ad is
12 more appealing or do you think the ad makes
smoking more
13 appealing, it's really not a question directed
at the
14 person who's answering, which would be is this,
is this
15 more appealing to you, does this make you want
to increase
16 your smoking. What the respondents here are
doing, at
17 best, is guessing at what effect this is going
to have on
18 other people.
19 Q. And, in your experience, in marketing and
marketing
20 communications, should you -- is the third
person effect
21 something that you need to take into account in
evaluating
22 results like this?
23 A. I would be very careful in the wording of
my
24 question. If I wanted to know the effect on an
individual,
25 I would ask something that is more directly tied
to that

3235
is your
2 attitude? What is your awareness level? Things
of that
3 nature, not about other people or not as general
as this
4 which would be interpreted as refers to other
people.
5 Q. Thank you. Could we go to the Pierce
chart that was
6 used on cross.
7 Do you recall you were shown this on
cross
8 examination and asked about Dr. Pierce?
9 A. Yes.
10 Q. Now, you said that you had seen this in
reviewing
11 Pierce's study, and you also testified that
Pierce did not
12 control for peer pressure and familial pressure

and other
is that
13 kinds of factors that affect smoking initiation,
14 right?
15 A. That's right.
16 Q. Can you take us through and tell us why it
is you say
17 that, why is it, in your view, Pierce did not
control for
18 those factors?
19 A. Well, those factors of exposure to smoking
peers and
20 exposure to smoking family will be some of the
things that
21 will develop a person's attitude toward smoking
or against
22 smoking. What the receptivity measure purports
to measure
23 is some receptiveness toward tobacco advertising
and
24 promotion. It's actually four separate measures
which are
25 not related to each other in a step block
fashion.

3236
1 And if you view those as an attitude
which
2 may be developed by exposure to peers and
family members
3 who smoke, you might expect to see peer and
family
4 exposure predicting that highest level of
receptivity that
5 he found to be so important in his study
predicting the
6 attitude.
7 Q. Okay. And your criticism of Dr. Pierce
has not been
8 published, is that right?
9 A. That's correct.
10 Q. Are you aware of literature that now has
welcomed
11 Pierce's study as the definitive breakthrough on
the
12 relationship between cigarette advertising and
smoking
13 initiation?
14 A. The social science literature certainly
has not. I
15 think the popular press has picked up the
headlines from
16 that study and publicized those headlines very
well.
17 Q. Okay. Is JAMA, the Journal of the
American Medical
18 Association, is that a well known marketing
periodical?
19 A. Not at all.
20 Q. And is epidemiology a required course for
all those
21 who specialize in advertising and marketing?
22 A. It is not.

23 Q. Let me ask you about advertising and
promotion
24 budgets. You were asked about the size of
advertising and
25 promotion budgets in the tobacco industry.

3237

1 What is the most popular cigarette
brand in the
2 United States today?
3 A. Marlboro.
4 Q. Okay. And which brand has the largest
advertising
5 and promotional budget, if you know?
6 A. I'm not sure I do know.
7 Q. If I told you it was Marlboro, would that
surprise
8 you?
9 A. No, it would not.
10 Q. Why would it not surprise you that the
most popular
11 brand is the one that is spending the most on
advertising
12 and promotion?
13 A. If smokers are smoking Marlboro, they are
going to be
14 seen by more other people who begin smoking, and
having an
15 influence in at least those ways.
16 Q. Let me ask you this, I mean, in terms of
the most
17 popular brands in any particular market, being
the ones
18 that advertise the most, is that something that
you observe
19 looking across markets different kinds of
product
20 categories?
21 A. It's common, yes.
22 Q. Now, you talked about the where is the
beef campaign.
23 Do you remember talking about that on direct?
24 A. Yes.
25 Q. Was that a campaign --

3238

1 MR. ROWE: Outside the scope of
cross, I didn't
2 ask anything about it.
3 THE COURT: Sustained.
4 BY MR. LERMAN:
5 Q. Well, let me direct you to a slide that we
used on
6 direct examination, if I could.
7 Talking about again the size of
advertising
8 promotion budgets, here you are looking at
advertising
9 expenditures alone. Is the automotive industry
spending
10 close to 11.5 billion dollars.
11 MR. ROWE: Objection, your Honor.
Is he

12 redoing direct?
13 THE COURT: Sustained. You don't go
back to
14 something you have already dealt with, so it
has to be
15 something he brought up for the first time on
cross.
16 MR. LERMAN: I was trying to address
the issue
17 of why the budgets are as big as they are.
18 THE COURT: I sustained the
objection.
19 MR. LERMAN: All right.
20 Q. Dr. Henke, when did the Joe Camel campaign
begin?
21 A. It was around 1986, I believe.
22 Q. You are going to have to raise your voice?
23 A. I think it was around 1986.
24 Q. Okay. And if I told you it was in 19 --
end of 1987
25 beginning of 1988, does that sound about right?

3239
not in
1 MR. ROWE: Objection, assumes facts
2 evidence.
3 THE COURT: Sustained. It's
leading. When you
4 ask your own witness whether that's correct
it's leading.
5 MR. LERMAN: That's all I've got,
your Honor.
6 THE COURT: Thank you. You can step
down.
7 MR. BERNICK: Your Honor, I just
have one
8 question on one document.
9 THE COURT: This is something that
wasn't
10 touched by -- I mean was touched by them but
wasn't dealt
11 with in direct.
12 MR. BERNICK: It was touched by
them, touched
13 by them not dealt with on direct. It was one
document we
14 had at side bar. I wanted to establish what --
15 EXAMINATION
16 BY MR. BERNICK:
17 Q. Good afternoon, doctor. My name is David
Bernick, I
18 represent Brown & Williamson.
19 A. Good afternoon.
20 Q. You were shown some excerpts from this
document here
21 relating to Kool. Do you recall seeing some
excerpts from
22 that document relating to Kool?
23 A. Very briefly.
24 Q. Very briefly. And you weren't shown that
was
25 actually part of a document that had a
transmittal page

3240

1 that I put over here, indicating that that was a
document
2 submitted by an outside advertising agency and
it says
3 attached is our recommendation for a 1997 Kool
promotional
4 program.

5 Did Mr. Rowe show you any actual
promotional
6 plan that was actually a docket by Brown &
Williamson
7 related to Kool.

8 THE WITNESS: No, not at all.

9 MR. LERMAN: That's all I have.

Thank you.

10 THE COURT: You can step down. Do
you have any
11 interim argument you wish to make?

12 MR. LERMAN: Yes, your Honor.

13 THE COURT: This, again, is an
opportunity for
14 the parties to comment on the testimony that
has just been
15 given, but it is not testimony, it's, or it is
not
16 evidence itself.

17 MR. LERMAN: Thank you, your Honor.

Ladies and

18 gentlemen, Lucy Henke has spent her career
studying
19 marketing, and studying the effect of
advertising on kids,
20 and what impact that has on those kids as they
grow up and
21 make buying decisions. That is her expertise,
that is the
22 reason we brought her to this courtroom and
that's what
23 she's testified about.

24 She has told you what the body of
literature
25 is, what the established wisdom is in this, and
she's also

3241

1 analyzed for you her own research and the
effect of
2 cigarette advertising on kids and their
attitudes. And
3 what she has told you is consistent with
everything else
4 you have heard in this case, which is cigarette
5 advertising, driving by a billboard with a
picture on it,
6 picking up a magazine that has some picture in
it, is not
7 what gets a kid to make the decision to smoke.

That's not
8 what does it. It's family and peer pressure,
it's
9 attitudes, it's social factors, that's a

complex personal
10 decision.
11 She's told you that what Dr. Pierce
did in his
12 supposed breakthrough study is try to isolate
advertising
13 in way that didn't do it at all. What she has
told you is
14 that Pierce's study compounded the receptivity
factor that
15 he used, supposedly the factor that measured
advertising,
16 because it included and was based on attitudes
that people
17 brought to cigarette smoking to begin with.
18 If you wouldn't wear a Joe Camel
T-shirt you
19 already had the training and understanding that
you didn't
20 want to be a smoker. If you had access to
cigarette
21 promotional items and were willing to use them,
it doesn't
22 say anything about your receptivity to tobacco
products.
23 It's a measure of what your attitude is with
respect to
24 likes and dislikes of tobacco products, which
is not an
25 advertising based issue. That's what we are
talking about

3242

1 when we talk about confounded.
2 THE COURT: Thank you, Mr. Lerman.
Two
3 minutes.
4 MR. LERMAN: Thank you.
5 MR. ROWE: Ladies and gentlemen, the
defendants
6 have said to you that they want you to judge
their case by
7 the credibility of their witnesses. This is a
witness
8 who's brought in answer to Dr. Pierce, an
epidemiologist
9 with national reputation who was brought on by
the Surgeon
10 General to do epidemiologic work for the
Surgeon General.
11 They bring in a marketing professor who you
could see
12 ignores common sense, and doesn't want to hear
any
13 information that would contradict her opinions.
14 She doesn't even want to look at the
internal
15 industry documents that show they know where
they are
16 spending 5 billion dollars a year, which is to
get
17 starters, get them to smoke cigarettes and then
keep them

look at 18 on when they get addicted. She doesn't want to
19 the results of the Joe Camel campaign.
20 Remember, she would slap up a chart
for your 21 satisfaction and show consumptions falling at
some 22 convenient time period. She doesn't want to
look at the 23 charts showing Joe Camel going up and the use
of Camel 24 going up in relation to the campaign. She
doesn't want to 25 think about why it is. Your own common sense
tell you why

3243
1 it is that kids are buying at 86 percent the
three most 2 heavily advertised brands because you know kids
are out 3 there and they are brand name conscious. So
this industry 4 markets those cigarettes to those kids and they
get 5 exactly what they wanted to get.
6 Professor Henke comes in and tries
to criticize 7 a medical doctor when she has no background to
do it. 8 More worse still, she ignores her own words
from the past 9 and says, oh, this showing has changed in the
interim. 10 What changed is she got hired by the tobacco
industry. 11 Thank you.
12 THE COURT: Thank you. Would the
defendants 13 call your next witness?
14 MR. BERNICK: Yes, we call Dr.
Rowell.
15 PETER P. ROWELL
16 called as a witness by and on behalf of the
Defendant, 17 being first duly sworn, was examined and
testified as 18 follows:
19 THE COURT: Would you state your
name and spell 20 your last name for the court reporter.
21 A. Peter Rowell. R-O-W-E-L-L.
22 THE COURT: Thank you.
23 Mr. Bernick.
24 MR. BERNICK: Thank you.
25 DIRECT EXAMINATION

3244
1 BY MR. BERNICK:
2 Q. Good afternoon, Dr. Rowell?
3 A. Good afternoon.
4 Q. Good afternoon ladies and gentlemen of the
jury.

5 Ladies and gentlemen, Dr. Rowell,
could you
6 tell us what your area of expertise is e?
7 A. My area of expertise is nicotine
pharmacology.
8 Q. That's kind of a mouthful. Could you tell
us briefly
9 just what nicotine pharmacology is?
10 A. Well, pharmacology is the discipline which
has to do
11 with how drugs act in the body, what their
mechanisms of
12 action are, and where they are at. And of
course nicotine
13 pharmacologists would be someone who specializes
in looking
14 at nicotine and how it acts in the body.
15 Q. Could you tell us what your teaching
position is
16 today?
17 A. I'm professor at the University of
Louisville School
18 of Medicine in Louisville, Kentucky.
19 Q. Let's talk a little bit about your
background. Would
20 you tell us a little bit about your educational
background?
21 A. Okay. I was born in St. Petersburg,
Florida, grew up
22 there, went to public school. From there I went
to Stetson
23 University in DeLand, Florida and received a
bachelors
24 degree in psychology with a minor in chemistry.
25 Q. And then after you graduated from college
what did

3245

1 you do next?
2 A. I went into the U.S. Army in 1969 for two
years.
3 Q. What was the nature of your service there?
4 A. My first year I was at, for the most part,
after my
5 basic training, at Ft. Sam Houston, I was in Ft.
Meade,
6 Maryland, Second Lieutenant, company commander
of a MASH
7 unit, a mobile arm of the surgical hospital.
Then I was
8 sent to Viet Nam in 1970, and with the 101st
Airborne with
9 the 502nd infantry battalion, attached to the
medics who
10 were supplied to the infantry battalions.
11 Q. After you got out of the service did you
go back to
12 graduate school?
13 A. Yes. I went to the University of Florida,
College of
14 Medicine and pursued a Ph.D. degree in
pharmacology.
15 Q. When did you first become interested in

nicotine

16 pharmacology or issues relating to nicotine?

17 A. Well, that started when I first started

graduate

18 school in 1971. So, the lab that I went into

was studying

19 compounds that were from marine mammals that

worked on

20 what's called the nicotinic receptor. And we

investigated

21 a number of different compounds, and from that

point really

22 up to now I've really looked at nicotine

pharmacology.

23 Q. Did you get your Ph.D?

24 A. Yes, 1975.

25 Q. After you got your Ph.D. what did you do

next by way

3246

1 of education?

2 A. I went to Vanderbilt University in

Nashville, the

3 Department of Pharmacology, again as a research

association

4 post-doctor fellowship, and again specialized in

nicotine

5 on smoking mothers and placental transport.

6 Q. How did it happen that you ultimately came

to be at

7 the University of Louisville?

8 A. Well, I was in Nashville, and the state of

Kentucky

9 has a tax supported research institute called

the Kentucky

10 Tobacco Health and Research Institute, and they

give grant

11 support to researchers to find projects having

to do with

12 nicotine pharmacology and other things having to

do with

13 tobacco.

14 And most of the taxes supported from

Jefferson

15 County, which is where Louisville is the major

city,

16 although the institute is actually in Lexington

where the

17 University of Kentucky is. So the University

of

18 Louisville was attempting to attract

researchers that, I

19 guess, could capture some of the tax money that

was mostly

20 in the biggest city, Louisville.

21 THE COURT: I would explain to the

jury, all

22 the people in Lexington hate all the people in

Louisville,

23 and all the people in Louisville hate all the

people.

24 It's broken down on a blue and white and red

and white

25 basis.

3247

1 THE WITNESS: That's exactly right.

2 BY MR. BERNICK:

3 Q. Have you, during the course of the
succeeding years,

4 have you published in the field of nicotine
5 pharmacologists?

6 A. Yes, I have.

7 Q. Would it be fair to say that that really
is the most

8 important focus of your research is nicotine
pharmacology?

9 A. That's correct.

10 Q. Have you done any work that you could
maybe

11 immodestly describe as being pioneering work in
the field

12 of nicotine pharmacology?

13 A. Well, some of the ones that are probably
pioneering

14 studies would be in 1984. I reported the
ability of

15 nicotine to release a neuro transmitter called
16 acetylcholine from the presynaptic or upstream

nerve side
17 of nerve tissue by working on the
neurotransmitters for

18 presynaptic autoreceptors.

19 Q. I put up on the screen one of the exhibits
in this

20 case. Is this an article that you wrote
concerning

21 dopamine release?

22 A. Yes. That's a study that appeared a
little later in

23 1987. This was a first report that nicotine
could

24 stimulate dopamine release by working on
terminals in which

25 is called the nucleus accumbens or pleasure
center of the

3248

1 brain.

2 Q. In fact, today will you be talking about
dopamine

3 release?

4 A. Yes.

5 Q. Has the Surgeon General, from time to time
in his

6 reports on smoking and health issues, had
occasion to site

7 your research?

8 A. Yes.

9 Q. Does that include the 1988 report?

10 A. Yes, it does.

11 Q. And in particular, is there a citation to
the work

12 that you have done on acetylcholine in
particular?

13 A. Yes. That's the first sentence there.

The Rowell

14 and Winkler 1984 study.

15 Q. I would like to ask a little bit about the
source of
16 funding for your work. I think you explained to
us that

17 your work is supported through, what are they,
tax receipts
18 that come through on the tobacco?

19 A. Yes, theirs a half a cent tax per pack of
cigarette
20 in Kentucky to support research.

21 Q. Is there any aspect of your scholarly
research on
22 nicotine pharmacology that is in some fashion
directed,
23 influenced or controlled by the tobacco
companies
24 themselves?

25 A. Not at all, no.

3249

1 Q. So basically, the tax receipts come in,
they go to
2 fund research, you are a person who does that
research,

3 would that be a fair statement?

4 A. Yes, that's right.

5 Q. I want to talk a little bit about the
topics we are
6 going to cover here today, and I'm going to put
up a chart,
7 I hope that will do that. Are these the topics
that you

8 are going to be talking about today?

9 A. Yes.

10 Q. And we have nicotine pharmacology. Will
you give us
11 an explanation of how nicotine acts in the
nervous system

12 of smokers.

13 A. Yes.

14 Q. And comparison of nicotine to other drugs?

15 A. Yes.

16 Q. And we'll then talk about nicotine and
smoking
17 behavior itself.

18 A. Yes.

19 Q. Let's go to the very first topic, which is
the

20 nicotine pharmacology. And let me ask you if
you can give

21 us an overview of the effects of nicotine, the
basic
22 physiological effects of nicotine as reflected
in exhibit

23 7326?

24 A. Okay, these are some of the better known
25 physiological effects of nicotine.

3250

1 The first one, it releases
adrenalin, which

2 adrenalin from the adrenal medulla is a gland
in the body,
3 and it releases this hormone which speeds up
the heart,
4 which is the next thing on the list, and does a
number of
5 other things to prepare the body for stressful
or
6 sometimes called a flight response.
7 Part of this is, it inhibits weight
gain
8 through releasing increasing blood sugars and
releasing
9 free fatty acids, and it also has some effect
in the brain
10 to depress appetite. Nicotine can get into the
central
11 nervous system into the brain and affect
12 electroencephalograph patterns, the EEG
pattern, through
13 its work to modulate some neurotransmitters in
the brain.
14 And one of its effects is that it
has been
15 shown in both animal and human studies to
increase an
16 acetylcholine neurotransmitter in a part of the
brain
17 which improves learning, memory, and ability to
focus.
18 Q. Through what system in the human body does
nicotine
19 act?
20 A. Nicotine acts through a receptor, which is
called the
21 acetylcholine receptor, so it's through
mimicking a natural
22 neurotransmitter called nicotine choline.
23 Q. Let's get real big first.
24 What part of what system within the
human body
25 is that receptor a part of?

3251

1 A. Well, it's part of the nervous system.
2 Q. So nicotine, when you talked about
nicotine
3 pharmacology, you are basically in the world of
how
4 nicotine acts within the nervous system. Would
that be a
5 fair statement?
6 A. Right. How it acts on nerves in the body.
7 Q. Now, let's get back real specifics again.
Is there a
8 chart that we have here that would help you talk
about how
9 the nervous system works and the role of these
different
10 features of the nervous system, I've got up 7327
11 Demonstrative 7327.
12 A. Right. Well, this is where nerves
communicate with

up stream 13 each other. So what is on the left would be the
to what's 14 nerve, and there is a long axon that comes down
terminal 15 called the nerve terminal. And that nerve
different 16 contains chemicals, and different nerves contain
neurotransmitters. And 17 chemicals, and those are called
inside that 18 they are represented here by the little balls
the reds 19 nerve terminal.
20 Q. Am I pointing to it now on the monitor,
21 dots?
22 A. Yes.
23 Q. And these are neurotransmitters?
24 A. Yes.
25 Q. There are a variety of those
neurotransmitters?

3252

1 A. When the nerve impulse comes down the
upper left up 2 stream nerves, it causes release of the
neurotransmitters 3 into the neurotransmitters in-between the
synapse. Those 4 molecules move across the synapse, or that
space, and bump 5 into receptors that are located on the down
stream, or the 6 next nerve, to trigger a response.
they 7 Q. Okay. Now these neurotransmitters, are
8 chemicals?
9 A. Yes.
10 Q. Naturally produced in the human body?
11 A. Yes.
12 Q. Okay. Do we have a chart here -- this is
now Exhibit 13 7328. It kind of gives a list of what many of
the left 14 neurotransmitters in the brain are. And that's
the human 15 hand side. And then the general functions of
side. 16 body that they affect. That is the right hand
17 A. That's right.
18 Q. Could you just give us some examples of
19 neurotransmitters, the functions that they
affect, and what 20 kind of substances might affect those
neurotransmitters? 21 A. Okay. The first one is acetylcholine, and
that is, 22 as I mentioned, associated with learning and
memory. These 23 are some of the major neurotransmitters.
24 Serotonin is a neurotransmitter that
affects 25 mood and sleep. It would be affected by

naturally

3253

we might get
of
serotonin
milk at
actually
levels might
sleep?
a human
tryptophan can
is a
a very
earlier that
the most
exciter
with that from
concerns about
like that
is a main
that is

1 occurring compounds such as tryptophan, which
2 in some food products. Milk has a large amount
3 tryptophan.
4 Q. Milk?
5 A. Milk contains tryptophan and can increase
6 levels in the body.
7 Q. Let me just ask you, if you have that warm
8 night before you go to sleep, if somebody were
9 doing a measurement, would they find serotonin
10 be increased and that would affect your mood or
11 A. That's possible. It's difficult to do in
12 being, but it's very probable that the
13 increase the serotonin levels.
14 Now, epinephrine is a compound that
15 neurotransmitter involved in alertness. It is
16 close cousin of Adrenalin, we talked about
17 can increase the stress response. Glutamate is
18 common neurotransmitter in the brain. It's an
19 neurotransmitter. Many people are familiar
20 monosodium glutamate or MSG food additives.
21 In fact, there has been some
22 adding too much MSG to baby foods and things
23 because you get a large increase with these.
24 Gamma Amino Butyric Acid, or GABA,
25 neurotransmitter. And that is the transmitter

3254

affect
that works on
function.
adenosine
neurotransmitter

1 acted upon by some muscle relaxants.
2 Valium is a common compound known to
3 that neurotransmitter.
4 Adenosine is a synaptic modulator
5 a number of transmitters to depress their
6 And caffeine can work on these
7 receptors to produce an increase in a number of
8 neurotransmitter compounds.
9 Dopamine is a compound or

10 involved in pleasure, reward, and also motor
activity.
11 It's the neurotransmitter that is a deficit in
patients
12 with Parkinson's disease, and it can be
increased by
13 nicotine, caffeine and some others.
14 In fact, most of these
neurotransmitters are
15 affected in some degree by nicotine, caffeine,
and some of
16 these other neuro modulator compounds.
17 Q. Have you prepared kind of a video
demonstration of
18 how different types of substances affect the
release of
19 these neurotransmitters?
20 A. Yes. I've centered on dopamine because
that is the
21 compound that is the neurotransmitter that's
thought to be
22 associated with pleasure and reward,
particularly in the
23 nucleus accumbens.
24 So their mechanism of reactions on
how
25 different drugs act on dopamine levels are
different. And

3255

1 this is what the video will describe.
2 MR. LERMAN: This is demonstrative
7269, and if
3 I can approach the witness he can operate it
from there.
4 THE COURT: Yes.
5 A. Let's see. Okay. This is a picture of
the synapse
6 that we just talked about. Now, this is a
dopamine nerve
7 on the left up stream side. So now the
neurotransmitters
8 locates, it is determined to be dopamine, and
what we have
9 here are acetylcholine receptors, which is where
nicotine
10 works.
11 So what we are going to see here is
nicotine is
12 going to come in and work on these presynaptic
receptors
13 to cause the release of dopamine. So now there
is a nerve
14 flash, the transmitter then is released on to
the
15 post-synaptic receptors. And what will happen
here, we'll
16 see there is going to be a flash of that nerve
and it
17 comes back in.
18 So we'll just go over this one more
time.
19 Nicotine comes onto the receptors, comes down,

the
20 neurotransmitter is released, acts on these
post-synaptic
21 receptors. There is a flash, the
neurotransmitter is
22 taken back up by these little red re-uptake
pumps, and
23 this recycles. So the nicotine works
presynaptically on
24 these receptors to cause an increase in
dopamine release.
25 Q. This is nicotine acting to increase
dopamine as a

3256

1 neurotransmitter?
2 A. Right.
3 Q. Okay.
4 A. Okay. The next -- okay. The next one
here is
5 caffeine. Now caffeine works through another
type of
6 receptor called adenosine receptors, and
caffeine will come
7 in, work on these presynaptic adenosine
receptors which are
8 again neuromodulators receptors force to produce
an
9 increase in a variety of neurotransmitters.
10 And here we are looking at dopamine.
Again,
11 the dopamine is taken back up into the
presynaptic nerve
12 terminal and can go back up again.
13 Q. So we now got caffeine doing a similar
thing?
14 A. Yes.
15 Q. Okay. Can we now go to another substance.
16 Do you have the same thing prepared
with
17 respect to harder drugs?
18 A. Yes. This is where cocaine works. Now
cocaine is
19 another psycho-stimulant, but it doesn't work
through a
20 receptor system. Cocaine works on these
re-uptake pumps
21 that we already saw were involved in removing
22 neurotransmitters, in this case dopamine, from
the synapse.
23 So cocaine, these are the molecules down here,
are going to
24 come in and block these re-uptake pumps.
25 Now, when a nerve impulse comes
down, dopamine

3257

1 is released and acts on these post-synaptic
receptors, but
2 the problem is that the dopamine cannot be
taken back up,
3 so it continues to have an effect on the
synapse.

4 Now, when another nerve impulse
comes down the
5 nerve which we'll see here, more dopamine is
released. It
6 can end up in the synapse. That can again hit
the
7 post-synaptic receptors to cause an effect.
8 Actually, what happens, in cocaine
you get a
9 depletion of the neurotransmitter from inside
the nerve,
10 and a lot of it ends up in the synapse.
11 Q. So you get less in here over on the left,
it ends up
12 accumulating in the synapse?
13 A. Right, because it can't get back in again.
14 Q. And when it's in the synapse is it enabled
to be
15 active, or is it there?
16 A. It's very active, because where dopamine
is having an
17 effect is on the post-synaptic receptors, that
second nerve
18 down there is where the dopamine is having its
reinforcing
19 properties.
20 Q. Have you prepared a similar demonstration
of what
21 happens with respect to amphetamines?
22 A. Yes, amphetamine works in a similar way,
except it
23 has an ability to get inside the nerve terminal
and to
24 displace or kick out some of the dopamine. So
now we have
25 amphetamine down here, and we'll see it's going
to come in,

3258
1 and some of the amphetamine will ends up going
inside the
2 nerve ending, the nerve terminal, and displacing
the
3 dopamine. But amphetamine also blocks the
removal of
4 dopamine from the synapse so that the
neurotransmitter has
5 built up to a large extent in the synapse and
can stimulate
6 these post-synaptic receptors.
7 And the difference is when more
nerve impulses
8 come down, we are left with a nerve terminal
that actually
9 contains amphetamine inside, which has
displaced the
10 dopamine. And so amphetamine has a fairly long
duration
11 of action.
12 Q. Now, using the kind of, you are talking
about
13 measurements that have been made in animals,
correct?

14 A. Yes.
15 Q. And I take it that the advantage of doing
these
16 experiments in animals is that you can actually
perform
17 experiments on animals and get very quantitative
about the
18 results. Would that be a fair statement?
19 A. Right. Animals can be anesthetized, and a
little Guy
20 cannula can be inserted in their brains under
anesthesia.
21 They are allowed to recover for several days and
a
22 microdialysis probe is put down. And I'll show
-- in fact
23 you have a little probe about the size of a
human hair is
24 going to come down, and we can measure the
amount of
25 dopamine in the synapse, so the probe can be
asserted, and

3259
1 then as drugs or natural behaviors can influence
the amount
2 of dopamine in the synapse, some of that can be
measured
3 with this little probe, the microdialysis probe
to tell how
4 much was released into the synapse.
5 Q. On this basis, is it possible to make
comparisons
6 between these different substances and in terms
of the
7 effect that they have in the release of this
dopamine
8 transmitter, neurotransmitter, in the pleasure
center of
9 the brain?

10 A. Yes.
11 MR. DOWD: Objection, your Honor.

It's vague
12 as to brain. I don't know if we are talking
about animal
13 brains or human brains at this point.

14 THE COURT: Overruled.

15 MR. BERNICK: Are all of your
experiments you
16 were talking about here involving animals.
17 A. Yes. These experiments, unfortunately I
guess,
18 cannot be done in humans because we can't insert
these
19 micro electrodes down in the brain of human
beings and
20 sample the transmitter levels because we have to
drill a
21 hole down in their skull.

22 Q. Let me pause and ask you a question for a
moment.

23 When you are doing work in your
field, which is

24 nicotine pharmacology, or doing work in
pharmacology
25 generally, is the idea simply to discuss and
draw
3260
1 conclusions about animals alone, or is there
any relevance
2 that this is designed to have with respect to
human
3 beings?
4 A. Well, really, the research is completely
designed to
5 try to figure out what's going on within the
human beings,
6 not what's going on in the animal. Luckily, the
animal
7 brain, these lower brain centers which contain
these
8 pleasure centers, reward activity, are very
similar all
9 mammals. So we can make some generalizations
about what
10 happens in rats or monkeys or other animals to
what would
11 happen in a human if we gave it the same kinds
of
12 compounds.
13 Q. Is it an ordinary part of your work in the
field of
14 pharmacology to be familiar with, analyze and
rely upon
15 research that is done also with respect to human
beings?
16 A. Yes.
17 Q. Let's go back. And I want to ask you
whether using
18 this technique is it possible to actually make
quantitative
19 comparisons between the effect of nicotine or
caffeine or
20 cocaine or amphetamines?
21 A. Yes, the amount of neurotransmitters that
is released
22 can actually be compared between these different
drugs in a
23 quantitative basis.
24 Q. Do you have a chart that you have prepared
that
25 reflects the data that's been gathered during
the course of

3261
1 this kind of comparative research?
2 A. Yes.
3 Q. Could you display that?
4 A. Okay.
5 Okay. This, this is a chart which
will show,
6 from some studies that are listed at the
bottom, the
7 effects of various drugs on the amount of
dopamine that

8 appears in the synapse through these micro
dialysis
9 studies.
10 The first one here is amphetamine;
and this is
11 related as the amount of increase in dopamine
which occurs
12 in a 60 minute period after the administration
of this
13 drug to an animal.
14 Q. Okay. And --
15 A. So that's amphetamine, we can compare that
to
16 cocaine, which has an effect of about 370
percent increase
17 over the baseline before the drug was
administered.
18 This is morphine, again a comparable
effect to
19 cocaine. And these studies, by the way, were
all done by
20 the same group of investigators in the same
lab.
21 Here is nicotine, the same group of
22 investigators, same lab, same technique, which
has an
23 effect, as you can see, about a hundred percent
increase.
24 And then caffeine is shown here,
which has a
25 less effect on dopamine release.

3262

1 Q. Are all of these data points normalized,
that is,
2 reconciled with one another so you are comparing
apples to
3 apples to apples?
4 A. Yes, these are all percent increase above
baseline
5 over a 60 minute time period cumulative effect.
6 Q. Might there be some variations, you say,
within a 60
7 minute period of time, might there be some
variations from
8 point to point to point in terms of when during
that 60
9 minutes you get the effect?
10 A. Yes. Some of the effects last longer.
For example,
11 with amphetamine, the effect is peaked and then
coming down
12 a little bit; nicotine is coming down a little
bit;
13 caffeine may be progressing up a little bit. So
it's, but
14 it's important to try to, as I say, compare
apples to
15 apples. We have to pick some time period, and
most of
16 these studies were done using ten minute
samplings. So we
17 have six determinations that go into these

doses.

18 Q. These relative relationships between the
levels of
19 dopamine, as between these different types of
drugs, are
20 they also reflected from the comparison of
dependence

21 potential in people?
22 A. Well, one of the propositions for why
drugs have a
23 dependence potential is they do in fact release
dopamine in
24 the synapse in this nucleus accumbens or
pleasure center
25 area. So, in respect to the dopamine that is
involved, and

3263

1 the reinforcing properties of drugs that would
be important
2 for determining or trying to quantitate the
dependence
3 potential that the drugs would have from a mild
or weak
4 dependence potential to a strong dependence
potential from

5 a pure pharmacological agent.
6 Q. Does this chart relate to the dependence
potential of

7 drugs in terms of people?
8 A. Yes, this is a medical pharmacology
textbook that
9 came out in 1997 in which there was a chart
which compared
10 a lot of drugs which are listed down the left
hand side
11 with their psychological dependence potential
and their
12 physiological dependence potential.

13 Now, drugs can have a dependence
potential both
14 based on the fact they have a high
physiological
15 dependence potential, which means they have
very high
16 withdrawal symptoms; if you didn't take them,
there would
17 be quite a bit of tolerance, or they could have
a high
18 dependence potential because of a psychological
or very

19 euphoric rewarding type of potential.
20 For example, with the first drugs,
the opiate,
21 morphine and heroin, they tend to have both a
strong
22 psychological and physiological dependence
potential. But
23 a drug like cocaine, which is about halfway
down, has
24 relatively weak physiological dependence, but a
very
25 strong psychological dependence, a very

pronounced high or

3264

1 very euphoric affect you would get with that.
2 A drug like barbiturates do not
produce an
3 extreme amount of euphoria, but they have a
very
4 pronounced withdrawal physiological dependence.
So
5 individuals continue to take barbiturates on
the basis of
6 their strong physiological dependence.
7 Basically, what we see in this
textbook is if
8 we compare drugs, the ones that would be
considered having
9 strong dependence potential, and in fact are
controlled
10 substances, have either a strong physiological
or a strong
11 psychological dependence or both.
12 The bottom two drugs down there are
not
13 controlled substances and they have, again from
this
14 medical pharmacology textbook, weak
psychological and weak
15 physiological dependence potential.
16 Q. Okay. And next we have nicotine and
caffeine down
17 there at the bottom?
18 A. Right.
19 Q. Was this a chart that you prepared, or
really
20 basically pretty much taken out of a chart
that's in the
21 textbook?
22 A. I prepared this from the chart in the
textbook, but
23 those words are the exact words used, and the
drugs are the
24 words.
25 Now, I put on the right hand side
whether these

3265

1 drugs are controlled by the Drug Enforcement
2 Administration or not, because I have to deal
with that
3 issue in my laboratory, for example.
4 Simply the fact that all of the ones
that would
5 be considered having the high dependence
potential are
6 controlled substances.
7 Q. We went back to our beginning chart and we
talked
8 about nicotine pharmacology and also about
comparison of
9 nicotine to other drugs.
10 A. Yes.
11 Q. Let's turn to the last item, which is

nicotine's
way of
your point
question of
nicotine or
simply a
that's the
have now,
based
of a very
research and
drug
nicotine on

12 contributions to smoking. Let me ask you, by
13 framing the issue, have you taken a look, from
14 of view as a nicotine pharmacologists, at the
15 whether smoking behavior is simply reaction to
16 whether it involves other features, other than
17 reaction to nicotine?
18 A. Yes, that's a little difficult to do, and
19 heart of a lot of the questions that researchers
20 is what part of cigarette smoking is a nicotine
21 pharmacological effects, and what type is more
22 complex behavioral effect.
23 So it's important to try to find
24 conduct research which attempts to separate the
25 effect or the pharmacological basis right from

3266
cigarette
about
apart from
talk about
enters into the
talking about
nervous system
system effects?
effects on the
magnitudes,
chart back
Honor, of the
going to have

1 all the complex behavior associated with
2 smoking. And of course we all know people talk
3 behaviors being highly dependence producing,
4 drugs.
5 Q. Let's focus on that a little bit. When we
6 drugs we are talking about a substance that
7 human body and has an effect on the body?
8 A. Right.
9 Q. When we talk about behaviors we are
10 things that people do?
11 A. Yes.
12 Q. Are drugs the only thing that can have
13 effects, or can behaviors also have nervous
14 A. Yes, behaviors have the same kinds of
15 systems that the drugs can have in different
16 and we can compare those as well.
17 Q. Can we go back to his system and put that
18 up. And I think this is a continuation, your
19 same demonstrative.
20 A. Okay.
21 Q. This is the old chart. I think we are

22 to advance it one.
23 A. Yes, there we go.
24 Okay. What we are going to see here
is simply
25 the types of experiments with micro dialysis
probes

3267
on the
And starting
caffeine,
when we were
animals which
were hungry,
source. And
are in their
upon
this is
study where the
drinking
in this
allowed to
measured in the
taken and
injection,
in a cage
the glass
mount the
levels in
sexual

1 measuring dopamine at a 60 minute time period
2 percent increase from the base cell levels.
3 out here, we are going to have nicotine and
4 which are exactly the same bars that we saw
5 comparing the drugs.
6 Now, in these studies, we have
7 were deprived of food for 24 hours, so they
8 and then they were exposed to their food
9 these are, again, freely moving animals that
10 home cage. And the amount of dopamine released
11 exposure or letting them eat was measured, and
12 simply a comparison again.
13 The next one would be a similar
14 animals were thirsty, they were deprived of any
15 for a long period of time. 24 hours, 23 hours
16 case. And they were, over a one hour period,
17 drink. And again the dopamine levels were
18 same way through these micro dialysis probes.
19 And finally, some male rats were
20 female were put into heat through an estrogen
21 and then the animals, the male animals were put
22 next to the females, let them see the female,
23 was removed, and they were allowed to go in and
24 female rats. And in this example the dopamine
25 the male rats were measured again through this

3268
human
neurotransmitter

1 activity response.
2 Q. We won't talk about the exact parallels in
3 experience.
4 A. The point being, simply, these

5 systems are there in the body not to respond to
drugs.
6 Obviously, but to help us in our daily lives to
do things
7 that help us survive and have some potential
benefit for
8 us. So they are naturally occurring dopamine
changes in
9 response to certain behaviors as well.
10 THE COURT: I asked the deputy clerk
to get
11 some more water before I saw this display.
12 BY MR. BERNICK:
13 Q. Dr. Rowell, we have been focusing a little
bit on
14 behaviors. Now again, this is work in
laboratory animals,
15 right.
16 A. Right.
17 Q. Again, if we now go to -- in the same
fashion as we
18 did with dependence potential, if we now go to
the human
19 side of the equation. Are their experiments
that have been
20 done which look to the impact of behavior versus
nicotine
21 and smoking behavior?
22 A. Yes. And again, in an attempt to try to
separate
23 what the pharmacological effects of nicotine are
from what
24 the other things that have to do with smoking
might be,
25 apart from the nicotine.

3269
1 Q. Okay. If you could advance your program.
2 A. Okay. So really, this is a study, which,
3 attempts to separate the effects of nicotine
4 effects of smoking. This is a blind experiment.
5 In other words, the individuals --
6 see in a minute why this works -- are given to
a group of
7 80 cigarette smokers and they are implanted
with an
8 intravenous cannula where they're administered
either
9 nicotine or saline, basically salt water, as
placebo.
10 Q. So they have an IV?
11 A. And IV cannula.
12 Q. And they don't know it, they can be
getting either
13 salt water through the IV or nicotine pulsed?
14 A. Yes. Now the nicotine was pulsed in, and
the saline
15 as well, to try to mimic the concentration of
nicotine that
16 would be taken in from cigarettes. And, as a

matter of
that the
intravenous
with

17 fact, the blood determination was made to show
18 nicotine levels that were achieved by the this
19 administration were just the same as would occur
20 cigarette smoking.

then -- or
allowed to
they were
intravenous
nicotine

21 Another group of individuals were
22 the same individuals in another trial were
23 smoke a cigarette that contained no nicotine,
24 denicotinized cigarettes. They also had their
25 cannulas implanted, and they also received a

3270
have a
smoke, and
receive any
didn't know

1 pulse or saline pulse, so in this way we could
2 group that received only nicotine and didn't
3 another group that only smoked and didn't
4 nicotine in their pulse, even though they
5 whether it would be nicotine or not.

nicotine in
both

6 Q. And also, then, people could get both the
7 the arm, and the smoke without the nicotine, and
8 nicotine and smoke?

that was
the
the

9 A. And then there was actually a third group
10 allowed to smoke a regular cigarette containing
11 nicotine, and they had the smoking behavior and
12 nicotine in the cigarette.

everybody what
is to give

13 Q. I think it's probably pretty clear to
14 the purpose of having the IV nicotine is, which
15 the nicotine dose.

smoke a
to isolate

16 What is the purpose of having people
17 denicotinized cigarette? What are you trying

holding,
associated with a
cetera.

18 by smoking a denicotinized cigarette?
19 A. Smoking has a to do with the lighting, the
20 the manipulation, the smoking activity
21 number of things people do, coffee, drinking, et

smoking a
nicotine

22 So all of these things should be there with
23 non-nicotine containing cigarette.
24 And then by giving them either
25 intravenously in pulse dosages, you should be

able to

3271

a 1 mimic what the brain feels from the nicotine as
2 pharmacological effect.
3 But the smoking is trying to have
them do 4 everything else but get the nicotine, if they
were in the 5 group that received just the saline.
6 Q. I'm not sure how clear all that ends up
being, but 7 let's look at the reasons and see if we can draw
some 8 comparisons.
9 A. There are a number of things that the
investigators 10 looked at first was its satisfaction. The
question of how 11 satisfying was this experience. And the first
couple of 12 bars -- and they were, by the way, allowed to
score these 13 on a scale of 1 to 7 -- in the dark green panel
over here, 14 we see, or these individuals received the pulse
nicotine -- 15 no, I'm sorry, I can't read that. That's the
pulse saline 16 and the yellow is the pulse nicotine.
17 So the first one, these individuals
are not 18 smoking at all. They are just sitting there
receiving an 19 intravenous infusion of either nicotine or salt
water. 20 And this would get around what you might call
the placebo 21 effect, because they don't know what group they
are from. 22 It's a blind experiment. And they rate that as
not very 23 satisfying. So this is, this is the first
group. 24 The second group, smoke non-nicotine
containing 25 cigarettes, the bar on the left in the green
are receiving

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1 a saline injection, so they are not getting
nicotine from 2 either the cigarette or from the intravenous
cannula. 3 The yellow bar are smoking the
denicotinized 4 cigarette, but they are receiving an
intravenous pulse of 5 nicotine.
6 Q. Is there a statistically significance
difference 7 between the two?

8 A. There is not between the pairs.
9 And the third group is, the third
group are
10 smoking their usual brand, and so that's the
nicotine and
11 the cigarette. So the two to really focus in
on here, the
12 two bars would be trying to again isolate the
nicotine
13 without any smoking activity, so this again
should just be
14 the pharmacological activity of intravenous
nicotine going
15 right to the brain as this pharmacological
effect,
16 compared to smoking a cigarette with no
nicotine involved.
17 Q. And what conclusion do you draw from that?
18 A. Well, the conclusion that I would draw is
that in
19 this acute study where these were deprived
smokers and they
20 were asked how satisfying was this, what they
really got
21 most satisfaction was from the actual act of
smoking,
22 rather than from the drug effect of nicotine.
23 Q. Okay. Now are there some other charts
relating to
24 the same study?
25 A. A number of things were asked of these
subjects.

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1 This is whether they enjoyed the sensation, and
this would
2 be more of the impact it's called, or the
effects of the
3 smoking.
4 And so the first group, not smoking
again and
5 receiving either on the left, saline, or on the
right
6 yellow bar, nicotine pulsed injection.
7 Just like in the last one, the next
group is
8 the denicotinized cigarette, no nicotine, and
they are
9 receiving either saline intravenous pulse, or
nicotine
10 intravenous pulses.
11 And finally, the usual brand.
12 And again, if we try to separate the
effects of
13 nicotine from all of the complex smoking
behavior, we
14 would be looking at it this way, nicotine
without smoking
15 or smoking without nicotine. And again, they
seem to
16 enjoy the smoking act more than just an
intravenous
17 injection of nicotine.

18 Q. In order to save time and expedite the
process, are
19 there similar comparisons that have been drawn
in varying
20 degrees with craving reduction and psychological
reward?

21 A. Yes.

22 Q. And in your field of pharmacology in
particular, what
23 learning do you derive when it comes to the
impact of the
24 behavior versus the nicotine as a drug impact,
in terms of
25 the impact that it has on these data?

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1 A. Well, my conclusion would be that smoking
-- I'm not
2 a behaviorist, so I would have to say that based
on the
3 neurochemical effects we showed on dopamine
release, and
4 things like that we discussed earlier, the
nicotine effect,
5 although it clearly contributes to smoking
behavior, is not
6 driving the smoking behavior as much as probably
the act of
7 smoking, at least in this acute study.

8 Q. If we go back to the beginning point here
and talk
9 about the basic topics that you have addressed
and the
10 items that you have covered, are any of the
conclusions or
11 any of the data that you have talked to us about
here
12 today, do any of them depend upon whether you
label smoking
13 as an addiction or a habit or a dependence?

14 A. No, not at all. Now, what you call these
things
15 don't really affect the contribution of the
nicotine or the
16 smoking.

17 MR. BERNICK: I have nothing
further, your
18 Honor.

19 THE COURT: Thank you. We'll take
about ten
20 minutes. About 23 after be back in the jury
room.
21 So same rules always apply. Don't
talk about
22 the case among yourselves nor with anyone else.
Don't
23 form any opinions or express any.
24 About ten minutes.
25 (Brief recess.)

3275

1 THE COURT: If you will retake your
seat. And

2 I'll come call upon the defendants to make
cross
3 examination -- or plaintiffs to make cross
examination.
4 MR. DOWD: Thank you, your Honor.
5 CROSS EXAMINATION
6 BY MR. DOWD:
7 Q. Good afternoon, Dr. Rowell.
8 A. Good afternoon.
9 Q. Can you tell me, Dr. Rowell, you are not a
medical
10 doctor?
11 A. No.
12 Q. And you are not a psychiatrist?
13 A. No.
14 Q. You are not a psychologist, are you?
15 A. No.
16 Q. You have never treated anyone with
nicotine
17 addiction, have you?
18 A. No.
19 Q. Have you ever smoked?
20 A. No.
21 Q. And does anybody in your family smoke?
22 A. Not -- my sister smokes, but she lives in
Florida.
23 Q. Not your wife?
24 A. No.
25 Q. Not your kids?

3276

1 A. No, not my children, no.
2 Q. And doctor, you talked about a study that
was done
3 where there was a comparison made between IV
nicotine
4 administration and denicotinized cigarettes. Do
you
5 remember that?
6 A. Yes.
7 Q. Just so we are clear, that was actually a
study in
8 humans, is that right?
9 A. Yes.
10 Q. And that was not a study that you
performed, is that
11 right?
12 A. That's right.
13 Q. All your studies have been in rats and
mice in
14 laboratories, is that correct, sir?
15 A. Right.
16 Q. And this study that was done on comparing
17 denicotinized cigarettes to IV nicotine was done
at Duke
18 University, is that right?
19 A. That's right.
20 Q. And you had nothing to do with that study?
21 A. No.
22 Q. And just so we are clear, you talked about
some --
23 showed some slides about satisfaction and things
like that

24 that came out of that study after people were
interviewed,
25 is that correct, sir?

3277

1 A. Yes.
2 Q. And now, doctor, that study was done
during one day,
3 is that correct?
4 A. I don't think that's correct. There were
80
5 subjects --
6 Q. Okay.
7 A. -- in that study.
8 Q. What I'm asking you, each individual
smoker, though,
9 only came in for one day?
10 A. That may be, yes.
11 Q. So, in other words, what they did is they
deprived
12 these people of cigarettes over night; they came
in the
13 morning, they gave them the denicotinized
cigarettes or the
14 IV amount; and then they checked with them and
asked them
15 questions, is that right?
16 A. That's right. And then they flipped it
and did the
17 same study again later.
18 Q. Okay. So these people were gone within a
day?
19 A. Right.
20 Q. And you are not saying that study suggests
that those
21 people would keep smoking those denicotinized
cigarettes,
22 is that right, sir?
23 A. No. I said just an acute effect, that's
the results.
24 Q. When you say acute, for guys like me that
means that
25 morning?

3278

1 A. It doesn't mean a chronic, long term
study?
2 Q. What the study showed was that there is
some sensory
3 impact that people use this denicotinized
cigarette and
4 gave them a little more satisfaction than IV
nicotine?
5 A. No, it showed that the intravenous
nicotine, not on
6 the sensory impact, the enjoying, craving
reduction, and
7 the psychological reward, we didn't see. It's
also on the
8 charts. None of those things were satisfied by
nicotine
9 injections.
10 It's basically looking at what

effects nicotine

11 as a pharmacological agent does apart from
smoking in a

12 human.

13 Q. It was all done, again, within the one
day?

14 A. Yes.

15 Q. And even the authors of that study say at
the

16 beginning of the study there is considerable
evidence that

17 supports the view that cigarette smoking is
maintained by

18 an addiction to nicotine?

19 A. That's what they say, their terminology,
right.

20 Q. And the authors of that study say the IV
nicotine did

21 decrease the craving for a cigarette by the
people who

22 received the IV nicotine, correct?

23 A. Say that again?

24 Q. In other words, the authors of that study,
in

25 reviewing their study, did say that the
administration of

3279

1 IV nicotine did reduce the craving for those
smokers, is

2 that right?

3 A. They may have. I don't recall that they
said that,

4 but I remember that the IV nicotine and the
craving

5 reduction from the denicotinized cigarettes were
in the

6 same order of magnitude as I showed for the
others. In

7 other words, the denicotinized cigarette had
more craving

8 reduction without nicotine than nicotine
intravenous.

9 Q. Right. During that first morning?

10 A. Right.

11 Q. And they didn't check with those people
again the

12 second day, did they?

13 A. No, because they would have been smoking
again.

14 Q. And they didn't check with them a week
later and see

15 if they were still using denicotinized
cigarettes. That

16 didn't happen, did it?

17 A. No. But that's actually been done in
other studies

18 where intravenous nicotine has been substituted
for smokers

19 who are trying to quit, and it's --
statistically, nicotine

20 by any route doesn't have a great dramatic
effect on the

21 craving part of it.
22 Q. Doctor, you agree with me, though, that
the delivery
23 of a drug can have an effect on the impacts
within the
24 human body, is that right?
25 A. Yes.

3280

1 Q. All right. For example, doctor, you
believe,
2 do you not, that crack cocaine, the smokeable
form of
3 cocaine, has far more dependence producing
potential than
4 powder cocaine, is that right?
5 A. It has more, yes.
6 Q. And that is due, you believe, to the
manner of
7 delivery, is that correct?
8 A. That's probably, correct, yes.
9 Q. In other words, it's smoked, and that has
some great
10 dependence producing potential than just
snorting cocaine,
11 is that right?
12 A. Right. But snorting cocaine, or any way
to
13 administer cocaine, has a fairly strong
dependence
14 potential.
15 Q. And, doctor, you agree that in addition to
nicotine
16 in cigarettes, there are other compounds in
cigarettes, in
17 cigarette smoke, is that correct, sir?
18 A. Absolutely.
19 Q. And you also believe that it's possible
that the
20 combination of those other active compounds may
actually
21 have some reinforcement effect on nicotine's
reinforcing,
22 is that correct?
23 A. That's possible, yes.
24 Q. So in other words, the smoker isn't just
getting pure
25 nicotine when they get a cigarette, there is a
combination

3281

1 of nicotine and other active compounds, isn't
that right?
2 A. That's right.
3 MR. DOWD: Doctor, I have no further
questions,
4 thank you.
5 THE COURT: Thank you, doctor.
Unless there is
6 some follow up.
7 MR. BERNICK: No.
8 THE COURT: Thank you.
9 Do you wish to make any interim

argument on
10 behalf of the defendants.
11 MR. BERNICK: Just very briefly.
12 Scientific theories have to be
tested. The
13 theory that nicotine is just the same as hard
drugs, the
14 theory -- remember how fast nicotine gets to
the brain,
15 how quickly it acts? The effects of nicotine
on the
16 brain, the theory that people smoke just for
nicotine,
17 these are all scientific theories and they have
to be
18 tested. Nicotine pharmacology is the field
through which
19 those theories are actually tested.
20 The reason we know about nicotine in
smoking is
21 because of literally almost 200 years of
research in the
22 field of nicotine pharmacology. And this man
came as a
23 nicotine pharmacologists. You didn't hear a
single
24 question about his credentials or quality or
integrity of
25 his work. And he told you exactly what the
data was and

3282
1 it didn't take very long, and it's not a
question of
2 labels and it's not a question of controversy,
they are
3 just the facts. They are very, very consistent
to what we
4 said in this case.

5 THE COURT: On behalf of the
plaintiffs.

6 MR. DOWD: Briefly, your Honor.
7 Ladies and gentlemen, what did Dr.
Rowell tell
8 you, he told you that nicotine improves or
increases the
9 level of dopamine in the brain. That's what he
told you.
10 He told you it's like those other drugs of
dependence that
11 you looked at on the chart. He just told you
there was a
12 difference in degree.
13 And then the defendants talk to you
about a
14 study that was done at Duke University. And
Dr. Rowell
15 told you he had nothing to do with that study.
He wasn't
16 there, he wasn't the one who conducted it, he
was just
17 reporting the results of that study to you.
And they

18 imply that somehow the denicotinized cigarette
was this
19 much better substitute for nicotine.
20 Ladies and gentlemen, it was all
done in the
21 morning. Smokers came in, they got a choice of
22 denicotinized cigarettes or IV nicotine. So
for that
23 morning that sensation helped them, but as Dr.
Rowell told
24 you, nobody checked those smokers the next day
or the next
25 day, or the week after that, or week after
that.

3283

1 Because, ladies and gentlemen,
people don't
2 smoke cigarettes without nicotine, that's the
fact. They
3 don't smoke denicotinized cigarettes. They
smoke because
4 they want the nicotine. That's why they smoke.
5 THE COURT: Thank you.
6 Would the defendant call your next
witness.

7 MS. BROWDY: The defendants call
Michael Dixon.

8 MICHAEL DIXON
9 called as a witness by and on behalf of the
Defendants,
10 being first duly sworn, was examined and
testified as
11 follows:

12 THE COURT: Would you state your
name and spell
13 your last name for the record?
14 Take a seat and state your name and
spell your
15 last name for the record.

16 THE WITNESS: Okay. My name is
Michael Dixon;
17 my last name is spelled D-I-X-O-N.

18 MS. BROWDY: Your Honor, Michelle
Browdy for
19 Brown & Williamson and British American
Tobacco.

20 May I proceed?

21 THE COURT: Yes.

22 - - -

23 DIRECT EXAMINATION

24 BY MS. BROWDY:

25 Q. Will you introduce yourself to the jury,
please?

3284

1 A. My name is Michael Dixon.

2 Q. I think we have gathered that.

3 Where are you from, sir?

4 A. I'm from England, originally born in
Nottingham,

5 England. I'm now living in the South of England
in a place

6 called Lippo.
7 Q. Is that near anything we would have heard
of?
8 A. Probably not. It's not far off the South
Coast of
9 England. There is a place called Portsmouth,
which is
10 famous for the Navy and the Mary Rose, the
famous ship that
11 was found about four, five hundred years ago.
12 Q. Who do you work for?
13 A. I work for British American Tobacco
Company. It's
14 commonly called BATCo, in the Research and
Development
15 Division, based in South Hampton, again in
England.
16 Q. What do you do there?
17 A. My position is Principal Research
Scientist. I'm
18 mainly concerned with aspects of how people
smoke, in terms
19 of their behavior, how they puff on cigarettes,
et cetera.
20 And also very concerned about how that reacts to
the taste
21 of cigarettes, it's what we call sensory
properties; but
22 taste and flavor and other aspects.
23 Q. Are you here to discuss the science of
smoking
24 behavior today?
25 A. Yes, I will be.

3285
1 Q. Could you, before we get into that, could
you briefly
2 describe your education?
3 A. Yes. I left school at 18; that was a long
time ago
4 in 1969. I then went to Lufton University of
Technology
5 and did a Bachelor of Science degree in human
biology. And
6 in 1972, I went to the University of London,
Saint George's
7 Medical School and did a Ph.D. in a field called
8 Respiratory Physiology.
9 Q. Could you please explain to us what
respiratory
10 physiology is?
11 A. Yes. Well, physiology is the normal
functioning of
12 organs of the body, the heart, the liver, et
cetera.
13 Respiratory physiology is more concerned with
the lungs and
14 breathing, and so things like how is the air
taken from the
15 outside into the lung? How does that get into
the blood
16 stream? What are the factors that control how
quickly we

17 breathe? How deeply we breathe?
18 And that very loosely is little of
the area of
19 respiratory physiology.
20 Q. And sometime after you finished your
doctorate, you
21 jointed BATCo as a scientist?
22 A. Yes. It was 1981 when I joined BATCo.
23 Q. Have you been there continuous ever since
then?
24 A. No, I haven't. I was there about three
and a half
25 years and I left BATCo and rejoined BATCo in
1991. And

3286

1 I've been there ever since.
2 Q. And do you have a chart that would help
explain the
3 type of research you do at BATCo?
4 A. Yes.
5 Q. All right. Smoker interaction, is that
what you work
6 on?
7 A. Yes. That's a good description of the
broad area
8 that I work in.
9 Q. And the first category there is sensory
properties of
10 smoke. And you referred to that, can you give
us a little
11 explanation what are you looking at when you
look at
12 sensory problems?
13 A. Yes. Smoke, like food, or something to
drink, you
14 can describe all sorts of sensations. If you
were eating,
15 for example, very spicy food you may have the
flavor of the
16 food; you may have -- it may be sweet or bitter.
And then
17 you I have the peppery tingling sensation from
the spicy
18 food.
19 In cigarette smoke, we have a number
of
20 sensations that people receive when they puff
and inhale,
21 smoke. A consumer would refer to it very
loosely as
22 taste. If you are a smoker you may have one
cigarette,
23 say that tastes good; another cigarette may
taste very
24 bad.
25 And we sort of unbundle that and
look at being

3287

1 many, many aspects of what is called taste but
the whole
2 sensory area.

3 Q. How about absorption components. What is
that?
4 A. Very briefly. When a person inhales
tobacco smoke,
5 some of those components of smoke will be taken
into the
6 body and absorbed from the lung or through the
mouth and
7 absorbed into the blood stream and access other
organs.
8 Nicotine is a very good example of
one area.
9 So I've been studying factors which influence
the
10 absorption of substances like tobacco smoke.
11 Q. How about respiratory and smoking
mechanics?
12 A. It's a technique of how people smoke on
the
13 cigarette; how do they puff on the cigarettes?
Big puffs?
14 Small puffs? How do they inhale; deeply,
shallowly? What
15 rate do they inhale at?
16 So it's really developing methods
and
17 techniques, what we call the mechanics of
smoking.
18 Q. How about smoking behavior?
19 A. Well, smoking behavior really encompasses
many of
20 those areas. And it's putting it all together,
really one
21 aspect of smoking behavior is what happens when
people
22 smoke one type of cigarette and then you switch
them to a
23 different cigarette, does that behavior change,
and does
24 that influence smoke uptake? Or does it's
influence
25 sensory properties?

3288

1 Q. And these are areas you have done research
in?
2 A. Yes, they are.
3 Q. And you are familiar with scientific
literature in
4 these areas?
5 A. Yes, I am.
6 Q. Have you published in these areas?
7 A. Yes, I have.
8 Q. Now, we have another graphic that would --
would this
9 help explain the topics we are going to cover
today?
10 A. Yes, that will.
11 Q. You are going to tell us about some early
nicotine
12 benefit research?
13 A. Yes.
14 Q. And compensation and nicotine?

15 A. Correct.
16 Q. Sensory reactors in smoking behavior?
17 A. Yes.
18 Q. And the role of pH?
19 A. Yes.
20 THE COURT: Can you hold for just a
second?
21 (Brief recess.)
22 THE COURT: Why don't you go ahead
and proceed.
23 BY MS. BROWDY:
24 Q. Dr. Dixon, let's start with the early
nicotine
25 research. How long have people been studying
nicotine?

3289
1 A. Well, nicotine was first isolated on,
discovered in
2 the early 1800's, around 1828. Really from that
moment on
3 people have been studying the effects of
nicotine the
4 pharmacology of nicotine.
5 Q. You might try to move a little closer to
the
6 microphone?
7 A. Sorry.
8 Q. How about nicotine benefits? How long or
when did
9 people start to research that?
10 A. It was probably around the 1940s when
people started
11 to think it's one of the reason people are
smoking may be
12 due to some beneficial effect of nicotine, so
late 30s,
13 1940's.
14 Q. And was there a time when BATCo began
studying the
15 benefits of nicotine?
16 A. Yes, BATCo became interested in the
benefits of
17 nicotine, it was really around the late '50's,
early 60's.
18 Q. Are you familiar with the Project Hippo
research?
19 A. Yes, I am.
20 Q. Is that some of the research you were
referring to?
21 A. Yes, that's one aspect of the benefits of
nicotine
22 research conducted for BATCo.
23 Q. When you talk about benefits of nicotine,
what kind
24 of issues was BATCo looking at in the late 50's,
early
25 60's?

3290
1 A. They were really looking at how people
cope with
2 stress, from every day stressful situations, and

there was
with stress.
hormones from
chemicals into
rate, for
respond to
stressful situations.

Now, there was a lot of work being
done before
influence
production and
hypothesis
alleviate stress
was
stressful
situations.

Q. Was the project discussed in the Hippo
reports, was
that novel research?

A. Not at all. You can see a number of areas
that they
been looked
work in
mechanisms.

Q. It might be helpful if we turn to the next
page of
the Project Hippo report.
Was that one of the examples of
previous

3291
research that has just been cited in the Hippo
report?

A. Yes, that refers to a paper by J. Burn,
who's an
English pharmacologists, and that was looking at
what's
effect of
reduction. And
that was a
hormonal response.

Q. And was the Hippo research reviewed by
experts at the
time the reports came out?

A. Yes, it was.

Q. And who reviewed these reports?

12 A. BATCo commissioned two pharmacologists to
review the
13 reports, and also talk to the people that did
the work.
14 And the two people was J. S. Burn himself, who
was the man
15 we just saw in the 1945 paper, at that time a
professor of
16 pharmacology at Oxford University, and one of
these people
17 worked with him, Dr. Michael Armitage.
18 Q. And what did Dr. Armitage and Dr. Burn
conclude about
19 the Hippo research?
20 A. They concluded a number of things. One of
the things
21 they were not happy about was the quality of the
research.
22 They discovered there are a number of flaws in
the work. A
23 lot of the techniques were not done in the way
that they
24 should have been carried out. They also
commented in the
25 appraisal that many of the areas of the study of
Hippo had

3292
1 already been reported and published in the
press. And
2 their conclusion at the end of that was that the
Hippo
3 work, although there was some interest in the
Hippo work,
4 it wasn't of sufficient quality to enable that
work to be
5 published into a scientific journal.
6 Q. Turning to the last page of their
assessment, which
7 is Trial Exhibit GK-64. The last sentence
reads: The
8 information of these reports is not sufficiently
complete
9 to justify any form of publication. Is that
consistent or
10 inconsistent with basing the analysis that you
have just
11 set forth?
12 A. Yes, if I, that is consistent with what I
was saying
13 in the analysis, yes.
14 Q. Do you know if BATCo research was turned
over to the
15 United States Surgeon General in the early
1960's?
16 A. On the Hippo work, no, it wasn't.
17 Q. I'm going to show you a telex exhibit
dated July 3rd,
18 1963, which is Plaintiff's Trial Exhibit 365.
19 Is that a document you have seen
before?
20 A. Yes, I have.
21 Q. And can you read the highlighted portion?

22 A. Yes. Do you want me to read it?
23 Q. Could you?
24 A. Yeah, sure. TRC consultant scientist. It
is too
25 early to submit Batelle reports to Surgeon
General's

3293

1 Committee, but we think they will agree that
continuation
2 by Batelle of this work would be useful.
Charles Ellis is
3 convinced of beneficial effects of nicotine but
agrees
4 further investigation desirable before
publication.
5 Q. And the Batelle records, what's that
referring to?
6 A. The Batelle reports is referring to Hippo
I, Hippo
7 II, and there was also another report which came
out of the
8 same work. Batelle were a contract laboratory
that did the
9 work for BATCo, they were based in Switzerland.
10 Q. And the TCR consultant scientists, who
were they?
11 A. They were the two I mentioned, Professor
Burn and Dr.
12 Armitage were the two consulting scientists.
13 Q. And the TCR suggests that further work
would be
14 desirable.
15 Do you know if research did continue
in this
16 area?
17 A. Yes, it did.
18 There was a little bit more work
with Batelle,
19 and also a lot of work was done by people like
Armitage
20 and Burn. So that area was continued.
21 Q. Was any of that follow up research
published?
22 A. Yes, it was. Yes, a lot of it was, yes.
23 Q. I'll show you a document, a review of
activities of
24 the Tobacco Research Council. You have seen the
books that
25 were the annual reviews from the TRC?

3294

1 A. Yes.
2 Q. And what, if you could explain, what the
Tobacco
3 Research Council is?
4 A. Yes, this was a group that was established
in the
5 United Kingdom, and it was tobacco research in a
group that
6 was retesting and conducting tobacco research.
It was
7 mainly concerned with medical aspects of

tobacco,
8 pharmacology, toxicology, et cetera.
9 The Tobacco Research Council was
funded by
10 United Kingdom tobacco companies. My company,
BATCo, was
11 one of the funders. And they did this in two
ways: They
12 actually had their own research establishment
up in the
13 north of England, and that was called the TRC
14 laboratories, and they brought in a number of
scientists
15 from all these disciplines to actually work on
tobacco
16 related, health related issues of tobacco. But
they also
17 produced external funding for non-TRC
scientists to work
18 in areas of pharmacology, toxicology.
19 Q. And did some of the research of the
Tobacco Research
20 Council follow up on topics that had been
explored in the
21 Batelle research?
22 A. Yes. The whole area of nicotine
pharmacology and the
23 effects on the endocrine system of the work was
followed
24 through in the TRC directly or through external
funding.
25 Q. And I'm showing you a page from the TRC
annual review

3295
1 that you had up on that screen before. This is
an example
2 of a list of publications that was sponsored by
the TRC?
3 A. Yes. In each of their reviews they would
have, in
4 the back of the review, lists of all the
published work
5 that was either done by the TRC scientists or by
funding
6 from TRC, and it is an example of that list of
7 publications.
8 Q. As we move into your second area of
testimony,
9 compensation, was some of the TRC research
that's being
10 discussed in this review on the topic of
conversation?
11 A. Yes, it was.
12 Q. And can you remind us what is
compensation?
13 A. It sounds very complicated, I'll try to
make it
14 simple. Basically, compensation occurs if you
have a
15 person smoking a higher delivery product, and
they were
16 then too choose a lower delivery product, and

compensation

17 refers to the change in their behavior when they
switched

18 from a high to allow yield product. For
example, they may

19 smoke more cigarettes and they take bigger
puffs, and that

20 would seem to be a compensating mechanism.

21 Q. And how long have people been interested
in the issue

22 of compensation?

23 A. People were interested in compensation,
really, going

24 back into the 30's and 40's, although at that
time they

25 weren't referring to the term compensation.

There was some

3296

1 work done by Finnigan in 1945. This is what he
was looking

2 at, giving people cigarettes and then having
very low

3 nicotine cigarettes. And he was looking at how
many

4 cigarettes did people smoke? Did they increase
their

5 smoking traits when they were given cigarettes
without

6 nicotine, so that could be classed as a measure
of

7 compensation.

8 Q. Was that research being done inside
tobacco companies

9 or outside by advertisers?

10 A. In the early days, in the periods I'm
talking about

11 up before the 60's, that work was really
outside. Later on

12 we would be working in the companies.

13 Q. The early work that you described, was
that

14 published?

15 A. Yes.

16 Q. And when did the term compensation start
to be used

17 more frequently?

18 A. It was really around about 1970 when
people started

19 to use the term compensation.

20 Q. And are you aware of the industry, either
published,

21 or funded studies that were published, on the
area of

22 compensation?

23 A. Yes, there were many.

24 Q. When compensation was discussed in the
public

25 literature, was there any discussion of why
people would

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1 compensate, why they would change their

behavior?

2 A. Yes. There was and there still is a
discussion of
3 why people would compensate. Around about the
70's one of
4 the principal hypotheses of the conversation was
to do with
5 nicotine. Basically the idea was that if a
person smoked a
6 cigarette which contained a reasonable amounts
of nicotine
7 and they were so comfortable, if like they were
used to
8 that amount of nicotine, the theory was if you
gave them a
9 cigarette of less nicotine what they were doing
they were
10 changing their nicotine pattern in order to
bring the
11 nicotine level back to their pre-switched level.
And that
12 was called the nicotine titration or nicotine
regulation
13 hypothesis.

14 Q. Do you have an example of an early study
that was
15 sponsored by BATCo or the tobacco industry on
compensation?

16 A. Yes.

17 Q. I'll show you a document that has been
pre-marked as
18 Defense Exhibit TG-24, pharmacological basis for
the
19 tobacco smoking habit, is this the same Allen
Armitage that
20 you --
21 A. This is the same Dr. Armitage, yes.
22 Q. And what did Dr. Armitage conclude about
how people
23 were smoking?
24 A. What Dr. Armitage did in this paper, he
was looking
25 at nicotine delivery from cigarette smoke. And
what he was

3298
1 interested in, what would happen if you changed
the size of
2 the puff. So he had a large puff, small puffs,
and he
3 reported that the nicotine would increase if you
had a
4 large puff and decrease if you had a small puff.
5 He then went into discussing how
this may be
6 important in how people smoke, and he referred
to what is
7 called a finger tip control over nicotine
delivery.
8 Basically he was saying that if you wanted to
get more
9 nicotine from a cigarette you could get a
bigger puff, if

10 they wanted less nicotine take a smaller puff.
It was
11 very, very much related to the topic of
conversation.
12 Q. And basically this came out of work that
was done at
13 the Tobacco Research Council laboratories?
14 A. Yes. At that time, Dr. Armitage was the,
I think he
15 was the head of pharmacology at the TLC at that
time.
16 Q. And BATCo helped sponsored that research?
17 A. Yes.
18 Q. Did BATCo publish any work on
compensation?
19 A. Yes, they did.
20 Q. Can you describe the -- I don't have it
with me, but
21 this is a cover page of a book called Smoking
Behavior by
22 Ray Thornton?
23 A. Yes.
24 Q. Who's Dr. Thornton?
25 A. Dr. Thornton, at that time, was a senior
research

3299

1 scientist in the British American Tobacco Labs
at South
2 Hampton.
3 Q. At some point did BATCo sponsor a
conference on the
4 area of smoke behavior?
5 A. Yes. This book was published in 1978, I
believe.
6 Two years prior to that, in 1986, BATCo
sponsored a very
7 large conference looking at all aspects of
smoking
8 behavior. And you see on the book psychological
9 inferences, that was the theme of the
conference. In that
10 area of research they invited external
researchers. There
11 were a number of people from the tobacco
industry and also
12 representatives from the UK Department of
Health. who
13 attended the meeting and this conference and
gave
14 presentations. And the book is a compilation of
all the
15 presentations that were produced at the
conference.
16 Q. There were people there at the conference
from
17 outside universities like South Hampton
University in
18 Oxford?
19 A. Yes.
20 Q. And also from the Department of Health and
Social
21 Security?

22 A. Dr. Nelms.
23 Q. And that's a British government
organization?
24 A. Yes, it is.
25 Q. Has the Thornton book been cited by the
U.S. Surgeon

3300

1 General?
2 A. Yes, it has.
3 Q. And have other health authorities written
on the area
4 of compensation?
5 A. Yes, they have.
6 Q. I would like to turn to a slightly
different aspect
7 of compensation, which is the question of the
extent of
8 compensation?
9 A. Yes.
10 Q. Is that something that BATCo has done
research on?
11 A. Yes, they have.
12 Q. And what is, do you have a graphic that
would help
13 explain what the extent of compensation is
referring to?
14 A. Yes.
15 Q. Can you explain this, if you would, to the
jury?
16 A. Yeah, I hope so. Can I point or pick out
anything to
17 you?
18 Q. Please.
19 MS. BROWDY: Your Honor, may he go
over and
20 reach over to the screen?
21 THE COURT: Yes, that's fine. Just
keep your
22 voice up.
23 THE WITNESS: I'll try and just lean
over.
24 Q. And the microphone moves, that might be
helpful.
25 A. I hope this explains the extent of
compensation. It

3301

1 looks a little complicated. I'll try to make it
simple.
2 If we have over on this side what we
call the
3 usual brand, and I've, for example there, given
you a
4 usual brand with an FTC delivery that's on the
smoking
5 machine of 15 milligrams of tar. Now if we
were to take
6 three people, and I've called them A, B and C,
and we were
7 to measure how many time they were taking from
the
8 cigarette, they wouldn't necessarily get the

same as the
9 FTC method I've indicated there; A would get
slightly more
10 than FTC; person B, the level of FTC; and
person C, less
11 than FTC.
12 This is because their behavior
patterns would
13 be different. If those three people were now
to say I'm
14 going to switch to a lower delivery product,
and say we go
15 from a 15 down to a 5 milligram product, what
would happen
16 to their tar intake.
17 If they made no change in their
behavior, they
18 didn't alter the way they smoked, and went down
from the
19 15 down to the 5, you would see this situation
where a
20 person B is getting 5, who was getting 15
before, he's now
21 getting 5. Person A is getting slightly more
than 5, but
22 he got slightly more than 15 prior to the
switch. And
23 person C is getting slightly less than 5, and
he was
24 getting less than 15 before the switch. So
they have
25 reduced their delivery in proportion to the FTC
reduction,

3302

1 and now we would say there is no compensation.
2 Now, the other extreme would be if
these
3 people, A, B and C, changed their behavior in a
big way.
4 Say they took very big puffs from the low
delivery product
5 and, as a result, they ended up in this
situation. So
6 before they switched they were having an intake
up here,
7 and after the switch they have the same intake.
In that
8 case, we would say they have fully compensated
for the
9 change in delivery. Moving now from the high
to low
10 cigarette they have got no reduction in tar
intake, and
11 that's the other extreme.
12 Now, in the middle there is
something which is
13 neither full nor zero compensation. In this
case, what's
14 happened, these people, moving from 15 to 5,
have reduced
15 their intake so they were up here. And they
are now down

no 16 there, they haven't gone down to the point of
17 compensation; and what we call this is partial
18 compensation. So those people have got a
reduction in tar 19 delivery, but it is not as big as the reduction
you would 20 have predicted from the FTC figures.
21 Q. Based on your research and your review of
the 22 literature, have you reached any conclusions as
to whether 23 compensation, whether there is no compensation,
full 24 compensation or partial compensation?
25 A. Yes. Based on both my own work and on
extensive

3303
1 review published literature, and there were a
lot of papers 2 out there on this topic, my conclusion is there
is 3 compensation when people switch from the high
delivery to 4 low delivery cigarette, particularly in the
short term, and 5 that compensation is not complete, it is partial
6 compensation.
7 Q. Let me show you an example from the
published 8 literature by Eminese Russell.
9 Who is Dr. Russell?
10 A. Mike Russell is a chemical clinical
psychiatrist, and 11 at that time he was working at the Addiction
Research Unit 12 at the University of London. And he has done a
lot of 13 work, particularly in the 70's and early 80's, a
lot of 14 work in smoking behavior and things like
compensatory 15 smoking response.
16 Q. Is he recognized as a reliable authority
in the field 17 in which he studies?
18 A. Yes, he is.
19 Q. And we'll page into the Russell study we
just had on 20 the board. It reads: Compensation for nicotine
was very 21 incomplete, only 36 percent. It seems unlikely
then the 22 smokers had a strong need to maintain nicotine
intake. 23 Is that consistent or inconsistent
with your 24 could be collusions on compensation?
25 A. That's consistent with my conclusions and
review of

3304

1 the literature. He is saying there is
compensation, it's
2 incomplete, and he quotes a figure of 36 percent
3 compensation.
4 Q. Now, if compensation is incomplete, does
that mean
5 that if someone switches to a lower FTC level
delivery
6 cigarette, do they get the same, lower, or
higher delivery
7 they got then when they switched to a lower
product?
8 A. They would get lower than what they got
from a high
9 delivery product.
10 Q. Are these topics at the public health
authority
11 relied and written on?
12 A. Yes.
13 Q. Are you familiar with the Independent
Scientific
14 Committee in England?
15 A. Yes, I am.
16 Q. Can you describe what that is?
17 A. The Independent Scientific Committee on
Smoking and
18 Health was a committee of expert scientists that
was
19 commissioned by the United Kingdom, and
Department of
20 Health, really, to look into the whole issue of
cigarette
21 smoking and smoking and health.
22 One of the things they were trying
to do was to
23 look at the research, to suggest further
research in many,
24 many issues of smoking and health and try to
implement
25 those research findings into the type of
companies to see

3305

1 if they could modify products to take on more
information
2 that was coming in from the scientific
communities.
3 Q. Is the Independent Scientific Committee on
Smoking
4 and Health well recognized in the UK and
recognized as an
5 authority on smoking and health.
6 A. I believe so, yes.
7 Q. And I'm showing you excerpts from their
third report,
8 the third report of the ISC published in 1980,
it reads:
9 Additionally, there is no clear evidence of
marked
10 compensation over long periods. So even
accepting that
11 some may occur, the lowering of tar and nicotine
yields

12 would still results in reduced average intakes
of these
13 substances.
14 Is this consistent or inconsistent
with your
15 conclusions on compensation?
16 A. That's very consistent with my
conclusions.
17 Q. I would like to move to another area of
compensation
18 now, the issue of vent blocking?
19 A. Yes.
20 Q. Is that something you are familiar with?
21 A. Yes, it is.
22 Q. Can you remind us what is vent blocking?
23 A. This refers to the ventilation holes of
the
24 ventilated cigarette.
25 One of the methods of bringing down
the

3306
1 delivery of smoke, In addition to things like
filtration,
2 is introduce added dilutions holes into the
filter tip so
3 when a person smokes a cigarette, part of the
air going
4 into the cigarette goes into the burning part
of the
5 cigarette to produce smoke, and part of the air
goes
6 directly into the filter and then will dilute
the smoke.
7 And vent blocking is the situation
where if a
8 smoker were to occlude some of these holes,
then that
9 obviously may have an effect on the dilution
into the
10 cigarette and could have an effect on the
delivery to the
11 smoker.
12 Q. And by occluding, do you mean they are
blocking the
13 holes with fingers or their lips?
14 A. Yes. The two cases which are cited,
either people
15 can block them with their fingers or their lips.
16 Q. And are these areas that you have looked
into?
17 A. Yes, they are.
18 Q. I put up on the screen demonstrative that
we have
19 turned over. I believe it is Demonstrative
00237. This is
20 a document that you prepared to help contribute
to the
21 issue of finger blocking?
22 A. Yes, it is.
23 Q. Can you explain what this study is about?
24 A. Let me step back one little point, if
that's okay.

25 Q. Okay.

3307

1 A. Around the early 80's there were a number
of studies
2 published on this where people interviewed
smokers, and
3 they were asking them if they were aware of the
vent holes,
4 and if her they were, or when they were told of
the vent
5 holes, they were asked if they felt they could
block them
6 with their fingers once they were smoking. And
a large
7 number of peoples, estimates between 40 and 60
percent of
8 people, said yes, they felt they could block
them with
9 their fingers.

10 This particular study was done in
1983 by one
11 of my colleagues in BATCo. And what he did was
to say,
12 okay, people think they may block them with
their fingers,
13 let's watch people. Let's study people to see
what they
14 actually do.

15 What he did in this case was take
133 smokers,
16 and they were all put into an interview
situation. And
17 the interview was video recorded so you could
actually see
18 what people were doing with their mouth and
their fingers.
19 And what you found was that when the person
placed the
20 cigarette into the mouth they will have the
cigarettes in
21 their fingers into the mouth, and as they were
taking the
22 puff they would do that with their fingers.
And the
23 finger contact would loosen from the fingers,
and the
24 cigarette would be supported in the mouth.
25 What he found, around 89 percent of
all the

3308

1 puffs being monitored from these 133 smokers,
there was no
2 finger contact with the filter at all during
that puff.
3 And he found that only 4 persons had finger
contact with
4 the cigarette on all puffs.

5 Q. Now, is part of what you do at BATCo is
watch panels
6 of smokers?
7 A. Yes.

findings 8 Q. And is the findings of Dr. Furez, those
have seen 9 consistent or inconsistent with the way that you
10 panel smoked cigarettes?
11 A. It is. I have spent a lot of time working
with 12 smoking panels and with smokers in general, and
what I tend 13 to do is observe people. That is, what parts of
my -- it's 14 not part of my job, I would tend to do that. I
would agree 15 with that high percentage of people who have
this manner 16 when the cigarette is in the mouth release the
fingers and 17 put it back to take the cigarette away. That's
very 18 consistent with my persona observation.
blocking? 19 Q. Have you also looked at the issue of lip
20 A. Yes, I have.
21 Q. And have you published on that topic?
22 A. Yes.
23 Q. I put up a document, Trial Exhibit GK
03243, the 24 incidence and consequences of filter vent
blocking amongst 25 British smokers. Is this the publication you
were just

3309

1 referring to?
2 A. Yes.
3 Q. And you are one of the authors of this?
4 A. Yes.
5 Q. Is this a peer review journal?
6 A. Yes.
7 Q. A chart on this that would explain how you
study lip 8 blocking among smokers?
9 A. Yes, there is.
10 Q. Can you explain what you did to study lip
blocking 11 among smokers?
12 A. Okay. What we did in this study was to
satisfy, see 13 if we could determine where the lips were placed
on the 14 filter. And we did that by staining the filter
for 15 proteins which are present on the lips and in
saliva. So 16 from that you can get an imprint of where the
lips are 17 placed on the filter, and then you can look at
that in 18 connection with where the vent zone position is.
And the 19 top point, there is a cigarette schematic, and
you can see 20 as you move down the cigarette the solid band is

where the

21 ventilation zone is.

22 Q. That's where the holes are?

see the

23 A. That's where the holes are. And you can

the

24 little bit in red now is where the person put

leave an

25 cigarettes in the mouth, and the lips would

3310

1 imprint.

lipstick, and

2 If I were a female wearing red

the imprint

3 she placed the cigarette in her mouth, that's

particular

4 you would get on the cigarette. In that

the

5 instance, the position of the lips, compared to

away from

6 position of the holes, you can see the lips are

on that

7 the holes. So there would be no vent blocking

8 particular example.

smokers to

9 Q. Okay. And then did you study a number of

versus

10 see where their lips showed up on the cigarette

11 where the ventilation holes were?

staining

12 A. Yes, we did. We didn't use the lipstick

I

13 technique, we were using men and women. So, as

lips, and the

14 mentioned, we used proteins would be on the

which was

15 saliva stained those, so we could get an imprint

occur from

16 left something like this here. And this would

17 several parts on the cigarette.

look at the

18 And what we would do is we would

point, and

19 maximum lip imprint which would appear at that

holes. And

20 we see how that related to the position of the

there is no

21 again, in that example there we would conclude

away from the

22 blockage of the holes, because the lips are

23 home zone.

explain

24 Q. And do you have a graphic that would help

25 your findings on this study?

3311

1 A. Yes.

any bigger,

2 Q. I'm not sure I will be able to get that

study of 400

3 Dr. Dixon. This is the data points from your

4 smokers?

smokes
blocking
line is 85
looked at
the lip
depth was not
inserted the
not come in
our
would be in a
the holes.
reflected on
me, what we
the
of the
around
the vent

5 A. Yes. Actually, it's 600 in total; the 200
6 were not ventilated cigarettes, so the vent
7 wouldn't be an instance there.
8 Q. It says at the top, 400 smokers, and next
9 percent no blockage. What does that mean?
10 A. Well, that means that of those smokers we
11 by looking at their maximum insertion depth from
12 imprint, we discovered that their insertion
13 onto the holes, so 85 percent of the smokers
14 cigarette into the mouth so that their lips did
15 contact with the whole, whereas 15 percent, from
16 measurements, we would show that their lips
17 position where there could be some blockage of
18 Q. And are those the data points that are
19 these charts?
20 A. Yes. If I use this one, it's closer to
21 have done through -- we have along here, we have
22 insertion depth. So zero would be the mouth end
23 cigarette. Now at this point, which I think is
24 about 14 millimeters from the mouth end is where
25 zone was placed.

3312

1 Now, each of these points are one
person, and
2 in this direction, we can look at how far they
inserted
3 the cigarette into the mouth. So these people
down here
4 had a very small insertion depth. These people
over here
5 had large insertion depths. And those, we
said, would
6 have blockage.
7 Are those people in this group here,
which are
8 further from the ventilation zone, and the
large number
9 over here, would have no blockage because their
lips are
10 not actually touching the vents.
11 Q. So when you have the two shaded blue
regions, where
12 they connect is where the ventilation holes are?
13 A. Yes, this line that comes down here, the
connection

14 between the shaded blue and the darker blue.
15 Q. Now, you, for 15 percent you indicate that
there is
16 some blockage but no increased delivery. What
does that
17 mean?
18 A. What we did on the same people, as well as
measuring
19 where they inserted the cigarettes, using the
lip imprint,
20 we also took a filter tip away and we analyzed
how much
21 nicotine was in the filter tip from each of
these smokers.
22 And without knowledge of how this filter works,
there is a
23 relationship between how much nicotine the
filter will take
24 out of smoke and how much it will let go through
to the
25 smoker, and that's called the filtration
efficiency.

3313
1 So from that knowledge of how much
nicotine is
2 in the filter, the filtration efficiency of the
cigarette,
3 we can calculate how much nicotine each person
received
4 from smoking. And we plotted that as a
function of their
5 insertion depth.
6 And so people in this area, okay,
this first
7 one had a high amount of nicotine, this would
be a row low
8 amounts of nicotine, over here, this would be
high and
9 this would be low. But you can see the spread
of data
10 points there, it's very similar over here.
11 So we would conclude that those
people that
12 moved on to the vent zone, the partially
blockage, did not
13 get any major increase in nicotine as a
consequence of
14 that.
15 Q. So you find basically the dots are falling
around the
16 same level when it's blocked, whether there is
ventilation
17 blockage or not?
18 A. Yes, yes.
19 Q. How do you explain as a scientist why
there would be
20 no increased delivery by people blocking their
ventilation
21 holes with their lips?
22 A. There are two aspects to that. One
aspects is, our
23 experiment here doesn't show how complete that

blockage is.

24 All it is saying is the lips are coming in
contact with
25 some of the ventilation zone. Other people have
looked at

3314

1 this and they have shown that the lips can
maximumly block
2 only about half the holes. They will not only
go around
3 all the cigarette holes, there will be some
holes still
4 working. If you were to block some holes and
you left some
5 of the holes still functioning, those holes will
take up
6 the slack, they will allow some air to come
through.

7 Q. So the ventilation process will work even
if there is

8 some blockage?
9 A. It will still work. It may not works as
effectively,

10 but it will still work under those conditions.

11 The second thing is a behavior
consideration.

12 If you were to really block the holes in a
really big way,

13 one of the consequences of that is the
cigarette, what we

14 call the draw resistance, that's how easy it is
to draw on
15 the cigarette, will increase.

16 And I can explain that. If you were
drinking

17 with a straw, and you had a very wide straw it
would be

18 very easy to bring the water into the mouth.

If you had a
19 very narrow straw it would be very hard work;
you would

20 have to suck very hard to get the water from
the drink.

21 Now, the same thing is happening
with that. If

22 we were to occlude many of the vent zones, the
cigarette

23 would become hard to draw. So as a
consequence, as people

24 puff in, how much they draw from the cigarette
would drop

25 down.

3315

1 So I would believe the reason why we
are not

2 seeing any major increase in nicotine delivery
when there

3 is evidence of some blockage is either the vent
zone is

4 still functioning, or if it is a blockage, that
the

5 person's behavior has changed to offset it.
6 Q. Have you reached any conclusions on vent
blocking as
7 compensation?
8 A. My conclusions, based on my own work and
other
9 people's work, is that I don't believe that vent
blocking
10 is a major contribution to the compensation
process.
11 Q. Turning to another aspect of compensation.
You
12 started out by discussing the theory that people
were
13 compensating for nicotine, do you recall?
14 A. Yes.
15 Q. And was there a time when people began to
try to --
16 where people were compensating for nicotine with
something
17 else?
18 A. Yes, there was.
19 Q. And is that something that you studied?
20 A. Yes, I've been be involved in that, and my
company as
21 well.
22 Q. And some people in the outside scientific
literature
23 have discussed that as well?
24 A. Most certainly, yes.
25 Q. Is there an example?

3316
earlier on,
were
3 A. Yes. One aspect of this, as I mentioned
4 one hypothesis of compensation is that people
5 compensating for the reduction in nicotine.
6 Now, scientists at that time were
saying, if
7 this is the case, would it be possible for
tobacco
8 manufacturers to produce a cigarette which was
reduced in
9 tar, but not reduced to the same extent in
nicotine.
10 And so the idea being, if people
were
11 compensating for the drop in nicotine, if the
nicotine was
12 not dropping they wouldn't have to compensate,
and if that
13 cigarette had a lower tar, they would, as a
result, get a
14 lower tar exposure from that cigarette.
15 Q. And that was a suggestion that came from
the outside
16 scientific community?
17 A. That was the from the outside scientific
community.
18 Q. And did Dr. Stephanie look at cigarettes
that had
19 been modified like that?

18 A. Yes, he did.
19 Q. And what did he find?
20 A. Among other things what Dr. Stephanie did
was to take
21 a group of people that smoked a higher tar and
nicotine
22 cigarette and he switched these people to a
cigarette, to a
23 cigarette that had low tar and what he called
moderate
24 nicotine and/or low tar and low nicotine. And
what he
25 found was that when people switched to either of
those two

3317
1 designs they compensated, and they compensated
to a similar
2 extent, and by the same mechanism.
3 So his conclusion was that certainly
in his
4 studies on those cigarette designs that people
would not
5 compensating for the reduction in nicotine.
But rather
6 surprising to him, he was saying that they were
7 compensating for the reduction in tar.
8 Now, he was a little bit surprised
about that;
9 in the paper he expresses this quite clearly.
And he then
10 suggests that the reason for the compensation
for tar was
11 as a consequence of the loss of taste and
flavor and
12 sensor responses, which are associated with the
tar
13 component of smoke.
14 Q. And this is a paper he published in the
British
15 Medical Journal, or this was published in 1981
in the BMJ.
16 And that's an authoritative journal in the
field?

17 A. Yes.
18 Q. And did Hasenfrass also study this habit?
19 A. Oh yes, about 10 years, 12 years later,
there was a
20 Carl Batisse group in Switzerland headed up by
Hasenfrass.
21 They looked at this topic in a slightly
different way.
22 What they did was to say, can we
experimentally
23 see what are the effects of reducing either
nicotine or
24 tar, and what they did for cigarettes that had
been
25 denicotinized.

3318
1 There is a product in the United
States called

2 Next that had very little tar and/or nicotine.
And he
3 looked at a group of smokers of how they
changed their
4 behavior when they went from a regular tar
containing
5 cigarette with a regular amount of nicotine and
they would
6 switch to a cigarette that contained virtually
no tar and
7 low nicotine and/or to a cigarette that had low
tar.

8 And what he found was compensation
only
9 occurred when people would switch from the
higher tar to
10 lower tar cigarette. When they were switched
to the
11 cigarette that contained a similar amount of
tar but low
12 nicotine; they didn't compensate.
13 So his conclusions were almost
identical to
14 Stephanie, that he was saying this appears that
15 compensation is in the tar, and the most likely
16 explanation is as a result of the sensory
receptor
17 properties of the tar.

18 Q. And this is his conclusion in that paper.
Thus,
19 under the conditions of the present experiment,
which
20 allowed good differentiation between the
nicotine and tar
21 yield effects of the cigarette, a reduction from
tar yield
22 appeared to be more important for compensatory
smoking
23 behavior than a reduction in nicotine yield?
24 A. Yes, that's his conclusion.
25 Q. Have you done any research following up --
let me

3319
1 strike that.
2 So the findings then of the later
scientist,
3 were those consistent or inconsistent with the
notion that
4 people were compensating for nicotine?
5 A. Well, the findings were that nicotine was,
and tar
6 were being decoupled, were inconsistent with the
notion
7 that people were simply compensating for
nicotine.
8 Q. And is that something that you went ahead
to study at
9 BATCo?
10 A. Yes.
11 Q. And to explain your research, would it be
helpful for
12 you to start by going over some of the sensory

work that

13 you have done to understand smoke?

14 A. Yes.

explain

15 Q. This is a graphic that you put together to

16 the sensory receptor effects that you studied?

17 A. Yes.

of the

18 Q. Would you mind explaining, both what some

research, and

19 sensory effects are that you look at in your

process?

20 also when they occurred during the smoking

I move,

21 A. Okay, I'll try to do that. Is it okay if

22 your Honor?

voice up.

23 THE COURT: Yes. Just keep your

24 THE WITNESS: Yes, thank you.

through

25 This is a schematic cross section

3320

key areas

1 someone's head, and I'll try and identify the

2 which are involved in the sensory mechanism.

tissue

3 Here is the nose. This is the nasal

4 over here. This area here is the mouth, okay?

And

5 that is the tongue, sort of wide flappy, you

can see that.

6 And moving along here, this is the throat, the

back of the

7 throat. Then next moving down into the larynx.

are on what

8 Our research and people's research

9 the sensory properties of cigarette smoke are.

in the

10 These areas are all areas involved

taste. The

11 smoke. Over here, this area here I've put on

which is

12 physiological explanation is called gustation,

13 taste.

sour, salty and

14 We only have four tastes; sweet

cigarette smoke

15 bitter. And there is some evidence that

bitter

16 can have a true gustator effect. You may get a

17 effect, in some cases a slightly sweet effect.

this area

18 Now, moving to the nose. We have

smell. Smell

19 here. And I call this here an oral faction;

flavor,

20 is extremely important in our recognition of

a drink or

21 whether it be cigarette smoke or whether it be

food, and

22 food. If we take something into our mouth, a

23 some of the chemicals rise above from the mouth

up here to
24 the nose, and that would give rise to the
flavor.
25 And if anybody, like I at the
moment, have a
3321
1 bad cold, and their nose becomes bumped up and
blocked,
2 food does not taste the same. And the
olfaction, that has
3 a huge effect on the overall flavor, resulting
in the
4 smell, flavor, taste in the mouth.
5 Another one in the mouth is what I
call
6 mouthful or mouthfill; that's neither taste or
flavor.
7 It's a sensation of thickness.
8 So if you were take to smoke into
the mouth
9 from a high delivery cigarette, you would be
aware of the
10 presence of smoke, it would be a very thick
full feeling
11 in the mouth while you are puffing on the
cigarette. If
12 you have a very low delivery product, a one
milligram
13 product, take that into the mouth, people would
say that's
14 very thin, very airy. So that's the sensation
in the
15 mouth.
16 And the final areas, moving from the
mouth down
17 into this region, the throat and the larynx
area where two
18 more important sensations associated with
smoke. One is
19 called impact and the other is called throat
irritation.
20 Q. Can you explain what is impact?
21 A. Impact is a sensation that you experience
when you
22 inhale the smoke. It's a very short-lived
sensation,
23 really about here, in the back of the throat.
Some people
24 may refer to it as catch, throat catch or throat
scratch.
25 We use it to impact. And the thing about impact
is that
3322
1 our research has shown that impact sensation is
caused by
2 nicotine.
3 If you take a cigarette and you
remove the
4 nicotine, like the next product, you will find
that you
5 will have taste, you will have flavor, you will

have very

6 little or no impact.

7 Q. How about throat irritation?

but it is

8 A. Throat irritation is similar to impact,

find it

9 slightly different. With throat irritation you

smoke, it's not

10 starts a little bit slowly. You inhale the

11 instantly there, it starts a few seconds later.

It will

12 then build up and persist for a few seconds

after you have

13 exhaled the smoke.

irritation?

14 In terms of what causes throat

to

15 Nicotine has a role. Nicotine will contribute

associated

16 irritation, but there are also other chemicals

17 with smoke which will also cause irritation.

So it is a

18 combined effect on the throat irritation?

person smokes,

19 Now, in terms of sequence when a

sequence.

20 I can just very quickly talk through the

here, in the

21 A cigarette would obviously go in

what happens

22 lips, and then when the person takes a puff,

soft pallet,

23 is this white flap there, which is called the

that

24 that's a muscular flap at the back of the mouth

tongue.

25 contracts. It comes down and folds next to the

3323

chamber in

1 What happens there, is that creates a sealed

will come

2 the mouth; the tongue is depressed and the jaw

in the

3 down slightly, and it will reduce the pressure

here, then

4 mouth cavity. Because the pressure is lower

cigarette,

5 outside air will then flow in through the

mouth.

6 create the smoke, and smoke will fill up in the

only place the

7 But during the puff, that is the

of the

8 smoke can go in the mouth region. So in terms

puffing on this

9 sensation, the key one you get as you are

sensation.

10 cigarette is this mouthful or mouthfill

most smokers

11 If a person inhales the smoke --

position as

12 do -- what happens, the relaxer moves into the

13 shown in the diagram. Air is brought in, it
sweeps the
14 smoke from the mouth down to the throat. In
the throat
15 you have the impact, throat irritation, down
into the
16 lung.
17 So the sequence is puff into the
mouth only,
18 followed by inhalation and nicotine sensation,
and impact
19 and throat irritation on the inhalation side.
20 Q. Thank you, doctor.
21 A. Thank you.
22 Q. And have you prepared another graphic that
breaks out
23 for the different sensory effects whether or not
nicotine
24 contributes to those effects?
25 A. Yes, I have.

3324
briefly?
1 Q. And if you could explain, just real
sensations I
2 A. Yeah, okay. Those cover the five main
research, and
3 have just been referring to, and from our
of nicotine
4 other people's research, looking at the effect
are that,
5 on eliciting these sensations, our conclusions
are talking
6 within the framework of cigarette smoke, they
smoke, that
7 about doses that are variable in cigarette
-- that is
8 nicotine really has no effect on the true taste
the aroma,
9 the sweet, sour, salty, bitter -- no affect on
main effect
10 no affect on the mouthfill. Where it has its
during
11 is on the impact and irritation in the throat
12 inhalation.
13 Q. Based on your studies of compensation and
of sensory
14 effects, have you reached any conclusions about
how or when
15 compensation occurs?
16 A. Yes, based on my own studies, and also
reviews of
17 many, many studies that are out there in the
literature, my
18 view is the main mechanism of compensation is
through the
19 change in the size of the puff, the puff volume.
20 Q. And has the Surgeon General written on
that topic as
21 well?
22 A. Yes, they have, or he has.
23 Q. I'm going to show you an excerpt from the

1984

24 Surgeon General's report reads, most studies
agree that
25 smokers rarely increase their daily cigarette
consumption

3325

1 upon switching from higher to lower yield
brands. Reports
2 are almost equally divided as to whether a
smoker increases
3 the number of puffs per cigarette or shows no
change on
4 switching to a lower yielding brand. There is
an almost, a
5 unanimous contention that smokers take a large
puff volume
6 from a lower yielding brand.

7 Is that consistent with your
findings or not

8 consistent with your findings?

9 A. It is consistent with my findings and
review of the
10 study by the Surgeon General.

11 Q. Does compensation based on a puff volume
effect, does
12 that tell you anything about the role that
nicotine plays
13 in compensation?

14 A. Yes, it does. Because it's the puff that
is being
15 controlled, you are thinking because nicotine is
not
16 involved in a mouthfull sensation or taste
sensation in the
17 mouth, it would imply that nicotine is not
involved in that
18 control mechanism.

19 I've done some work to establish
that and have
20 come to the conclusion that what happens in the
control of
21 puff volume is that, as the person takes smoke
into the
22 mouth, if that cigarette is low in tar and low
in
23 mouthfill, low in body, the person will take a
longer puff
24 and a bigger puff, as a consequence their
volume will
25 increase.

3326

1 And that is my opinion of what is
the main
2 control factor on the puff volume in the
compensatory
3 response.

4 Q. So from your review, it is for tar or
nicotine?

5 A. It is for tar, but through the mouthfill,
the body
6 properties of tar, which is influencing the size
of puff.

7 Q. Anything published on this?
8 A. Yes.
9 Q. And are your findings consistent or
inconsistent with
10 findings of outside literature?
11 A. There were other people who have published
similar
12 findings in the controlling of puff volume also.
It is
13 very consistent with the compensation with the
decoupling
14 tar and nicotine work.
15 Q. I would like to turn to the last topic of
your
16 testimony, Dr. Dixon, the issue of nicotine and
pH. Is
17 their sensory refactors related to the pH of
smoke?
18 A. Yes.
19 Q. Can you remind us again, what does is the
pH of smoke
20 referring to?
21 A. Very simply, the pH of smoke refers to the
acidity or
22 alkalinity of smoke. A pH of 7 would be
neutral; neither
23 acid or alkaline. If you increase from 7 going
up to 14,
24 that would be more and more alkaline. If you go
from 7
25 down to 1, that would become more and more acid.

3327
1 Q. And are you prepared to speak today to
what effects
2 increasing pH would have on the cigarette's
absorption of
3 nicotine in the body?
4 A. Yes.
5 Q. And on the rates of absorption of
nicotine?
6 A. Yes.
7 Q. The amounts of nicotine absorbed?
8 A. Yes.
9 Q. And sensory effects, if any?
10 A. Yes.
11 Q. Would it be helpful for you to explain
your testimony
12 to start with some of the physiological or body
factors
13 that affect where nicotine is absorbed in the
body?
14 A. Yes, it would be.
15 Q. This is a chart that you have prepared?
16 A. Yes.
17 Q. Can you explain the physiological enactors
that
18 affect where nicotine is absorbed in the body?
19 A. Okay, it wouldn't just be nicotine, it
would be for
20 any inhaled substance. But we'll talk about
nicotine.
21 What I've got on that chart there

are three
the lung,
exchange,
differences

22 sites, the mouth, the throat and the lung. And
23 I'm really talking about what's called the gas
24 the alveolus, air sack region of the lung.
25 Now, physiologically there are

3328

1 between those sites in the mouth. First of
all, we have a
2 very thick membrane. The mouth is designed for
us to
3 chomp sweets and put all sorts of things in our
mouth, and
4 it is a very tough membrane.
5 If a substance like nicotine was
absorbed into
6 the saliva it would be very difficult for that
substance
7 to pass through the membrane. It would get
there
8 eventually, but it would be a thick hard
passage through
9 the membrane. Also, the mouth doesn't have a
huge blood
10 supply, as does the lung. So it will get into
blood, but
11 it is not a huge supply there.
12 Once it's in the blood, if you are
talking
13 about nicotine traveling into the brain, a lot
of people
14 are interested in that aspect, it would have a
very slow
15 route. Because going in through the mouth it
would go
16 into the venous system. The blood would then
have to
17 drain back down into the heart. It would have
to go
18 through the right side of the heart through the
lungs,
19 back to the left side of the heart into the
arterial
20 system, and upwards and onwards to the brain.
So that is
21 a very short -- sorry, very long-winded route.
22 If we move down a little and it goes
through
23 the throat, the situation is very similar to
the mouth.
24 The lining of the throat is thinner, so we have
a thinner
25 membrane. But if the nicotine was to pass
through that

3329

1 membrane and get into the blood, the route
through the
2 brain is very much the same as through the
venous system,

3 through the heart, lung, back through the heart
and back
4 to the brain.
5 If that nicotine survived the route
through the
6 mouth, the throat, and got down to the end of
the line,
7 the alveolus, gas exchange region of the lung.
8 Q. Is that the deep lung?
9 A. Yes, where our oxygen is absorbed and our
CO2 is
10 pushed back from the lung. It's in that region.
11 If it were to survive that pathway
and get down
12 into that region, the situation is now changed
completely.
13 The air sacks, or alveolus, have the thinnest
membranes,
14 probably the thinnest membranes in the body,
nicotine
15 would very easily get across that membrane.
The blood
16 supply in the lung's purpose is designed from
pure oxygen
17 from the lung and waste gasses back.
18 The secret is that if the nicotine
reaches the
19 blood at that level in the lung, the blood goes
straight
20 back from the left side of the heart into the
arterial
21 system and back into the brain. So it has to
use the
22 shortest route from the inhalation system that
you can
23 get.
24 Q. So the mouth and throat are a slow route
to the brain
25 and deep in the lung is the fastest route?

3330

1 A. The deep part in the lung is the fastest
route, yes.
2 Q. Have you also looked at some of the
chemical factors
3 affecting absorption if you change the pH?
4 A. Yes, I have.
5 Q. And can you briefly walk through those?
6 A. Okay. Going back again the mouth, throat
and lung.
7 If we start off with our smoke particle, those
are things
8 you can see in the room if you breathe out. The
nicotine
9 starts off as it leaves the cigarette actually
in the smoke
10 particle. Now, if you had a high pH in your
smoke, so you
11 were to push the pH up by one means or the
other, what that
12 does is it changes the form of nicotine. The
nicotine
13 becomes from the bound form into it is free

form.

14 Now, free nicotine is what's called
more
15 volatile, is a chemical term. By volatile it
means that
16 it can come out of the particle more easily
than bound
17 nicotine, okay? So if we had a high pH, and
the smoke
18 particle entered the mouth, there is a little
warming in
19 there, there is a little dilution in there, and
because
20 that nicotine is more volatile, it would tend
to cause
21 some of that nicotine to come off to be
absorbed into the
22 saliva and take the slow route, if you like, to
the brain.

23 As a consequence of that, you will
find that
24 nicotine is being lost in the mouth region,
nicotine will
25 add to the output into your smoke. So if you
are losing

3331
1 nicotine, the alkaline, it will drop off and
the pH will
2 start to come down, so that nicotine is getting
a little
3 less volatile. You will still lose nicotine in
the
4 throat, you will have some of that nicotine
coming off
5 getting access into the blood supply through
the throat,
6 and by the time it's gone all through the
tubing, if you
7 like, the throat, the trachea, the bronchus,
this is
8 happening all the time.

9 By the time you get down into the
gas exchange,
10 the alveolus, what level of the lung you will
find your
11 initial pH will be different to what it was at
the start,
12 because you have lost nicotine on that route.
Nicotine is
13 a base, so it's increasing pH. If you lose the
nicotine,
14 the pH will come down.

15 Q. And based on the analysis that you have
done, did you
16 reach any conclusions on what effect raising pH
would have
17 on how quickly nicotine would go to the brain in
a modified
18 product?

19 A. Yes, I have.

20 Q. Would you mind explaining that?

21 A. Okay. If we were to take an acid smoke,

and we were
22 to get a person to inhale the acid smoke, that's
the low
23 pH, what we would find is those smoke particles
will travel
24 from the mouth down through the throat, down
into the deep
25 lung. And when they get to the deep lung that's
where most

3332
1 of the nicotine would come off for absorption.
2 If we were then to increase the pH,
3 significantly make it more alkaline, the
situation would
4 change. So now the smoke particles were to go
into the
5 mouth. I said, if you increase the pH, that
nicotine is
6 more free, more volatile, so you get more of
that nicotine
7 coming off in the mouth region.
8 As we go down through the throat
we'll see
9 nicotine coming off to the throat. And by the
time that
10 will have reached the lung it will have lost
most of its
11 nicotine. So increasing pH would result in
more nicotine
12 being taken in the mouth and throat and less
nicotine
13 being taken into the deep lung.
14 Q. And what effect does that have on the
speed in which
15 it reaches the brain?
16 A. In terms of speed in which it reaches the
brain, if
17 you are absorbing more nicotine in the mouth and
upper
18 airway, that would slow down the rate at which
nicotine
19 would reach the brain, because of the
circulatory system.
20 Q. Because it takes a slower route to the
brain?
21 A. More difficult to get into the blood. And
once in
22 the blood it takes this slower route.
23 Q. Would there be any sensory effects from
changing the
24 pH of smoke?
25 A. Yes, there are. Because, as I mentioned
before, that

3333
1 nicotine causes sensations in the throat,
particularly the
2 implant, and to some extent throat irritations.
3 So if you were shifting your
absorption of
4 nicotine from down in the lung by increasing
the pH so

5 more was being absorbed in the mouth and less
in the lung,
6 you would enhance the sensation, you would
increase the
7 sensation in the throat, and people would
describe that as
8 a higher impact or higher irritation as a
result of that
9 pH change.

10 Q. Are you familiar with the report of
Canada's Expert
11 Committee on Cigarette Modifications from 1996?

12 A. Yes, I am.

13 Q. And is that recognized a reliable and
authoritative
14 document in your field?

15 A. Yes, it is.

16 Q. And you are familiar with the fact that
Dr. Benowitz
17 spoke at that conference?

18 A. Yes, he did.

19 Q. Let me show you an excerpt from the
Canadian expert
20 report of Dr. Benowitz.

21 With respect to pH itself, my
impression that

22 whatever gets into the lung pretty much gets
absorbed.

23 The lung has a huge surface area and is highly
buffered.

24 A more important factor when considering pH is
the

25 proportion of nicotine found in the vapor
phase. This

3334

1 would impact on the upper airway nicotine
stimulation and

2 determine how much nicotine could be absorbed
from the

3 mouth.

4 That is, if you have high pH you can
absorb a

5 lot from the mouth, whereas smoking the usual
blonde

6 cigarettes, the smoke of which is an acidic pH,
you don't

7 absorb anything from the mouth.

8 The higher the pH the more nicotine
impact

9 there would be on the throat. One would
experience more

10 irritation, more of a nicotine type sensation.

I don't

11 think that differences in pH would make much of
a

12 difference in bioavailability, although it
would impact on

13 how strong the cigarette taste.

14 Is that consistent or inconsistent
with the

15 theory you have explained today?

16 A. It is very consistent.

17 Q. And have you reached any conclusions on
what the
18 effect of raising pH would have on the total
amount of
19 nicotine absorbed in a body?
20 A. Yes, I have.
21 Q. And what is that conclusion?
22 A. The conclusion is that the total amount of
nicotine
23 absorbed -- we are not talking about the site of
24 absorption, we are talking about it is not
influenced by
25 pH. Even with, as Dr. Benowitz says, blonde
cigarettes

3335

1 which have a low pH, virtually all of that
nicotine he's
2 taken into the system will be absorbed
somewhere, and by
3 raising the pH will not make any difference by
the total
4 amount of nicotine absorbed from that puff of
smoke.
5 Q. Is that conclusion consistent or
inconsistent with
6 the outside scientific literature?
7 A. It is entirely consistent with the
literature.
8 Q. Are you familiar with the piece Dr.
Benowitz wrote in
9 the New England Journal of Medicine that covers
this topic?

10 A. Yes.
11 Q. This is a 1988 article by Dr. Benowitz?
12 A. It is, yes.
13 Q. And his finding that when tobacco smoke
reaches the
14 small airways and alveolus of the lung, the
nicotine is
15 absorbed rapidly, regardless of the pH of the
smoke.

16 Is that consistent or inconsistent
with your
17 views?
18 A. Entirely consistent with my views. By the
time you
19 are getting in that region of the lungs, it is
absolutely
20 huge, it's the size of a football field. And
the pH is
21 negligible, and that nicotine will very rapidly
evaporate
22 from that particle, pass the membrane, and not
be absorbed.
23 So my view is it is highly consistent with that
statement

24 made on that paper?
25 MS. BROWDY: Thanks, doctor. No
further

3336

1 questions.

2 THE COURT: Cross examination.
3 MR. KRISTAL: I'll try to be short.
4 THE COURT: How long do you think?
I've given
5 some thought to getting the computer on line.
6 MR. KRISTAL: I hope to be done in
15 to 20
7 minutes.

8 THE COURT: Why don't we proceed.

9 CROSS EXAMINATION

10 BY MR. KRISTAL:

11 Q. Afternoon, Dr. Dixon, how are you?

12 A. Very well.

13 Q. We have met before?

14 A. We did, yes, in Miami.

15 Q. Would you agree that Dr. Neal Benowitz is
perhaps one
16 of the leading researchers in the world in
nicotine

17 pharmacology?

18 A. He certainly is one of the leading
researchers in the

19 nicotine pharmacology, nicotine
pharmacokinetics.

20 Q. The only portion of your testimony I want
to discuss
21 with you today relates to the Batelle research,
the early

22 nicotine research, okay?

23 A. Yes.

24 Q. The three documents that you showed the
jury, the
25 Hippo I report, that cable, and then the
criticism of the

3337

1 Hippo I report, were those the only documents
you saw

2 relating to that early nicotine research?

3 A. No, they weren't. There were other
documents I have
4 seen as well.

5 Q. Would you agree to the early nicotine
research

6 sponsored by the British American Tobacco
Company through

7 the Batelle labs, the results on that, results
of nicotine

8 was far more extensive than the published
literature at the

9 time?

10 A. No, that's not my impression? Having
looked at the
11 reports, the Hippo I, Hippo II, fate of
nicotine, and also

12 looking at literature around the time.

13 For example, there was Larsen, Haig
and

14 Savette, who published a huge volume on the
medical

15 effects of tobacco and nicotine in 1961. And
that

16 contains reams and reams of, for example,

information on

17 the very topics that were covered in Hippo.

18 Q. Do you know who Sir Charles Ellis is?

19 A. I never knew Sir Charles Ellis, but I knew
of him.

20 Q. He was one of the top scientists for
British American

21 Tobacco at that time, in the 50's, 60's?

22 A. Sir Charles Ellis was a physicist who was
a

23 scientific advisor, a consultant to BATCo. I
don't think

24 he was employed by BATCo as a practicing
scientist.

25 Q. And he was the person at British American
Tobacco in

3338

1 charge of the early nicotine research at
Batelle, correct?

2 A. He was, yes, the scientific advisor that
was

3 commissioning this work, yes.

4 Q. And you understand, do you not, from
reading the

5 documents, that Sir Charles Ellis wrote at the
time about

6 that research, that your opinion regarding
whether or not

7 it was far more extensive than what was in the
published

8 literature is directly contrary to what he said
at the

9 time, isn't that correct?

10 A. That's correct. Sir Charles was on record
as saying

11 we knew more about nicotine than anyone else,
yes, but

12 looking at my review of what was in Hippo, my
review of

13 what has been known and published before, I
believe that

14 Sir Charles was wrong in that comment.

15 Q. Now, you would also agree, would you not,
that the

16 Batelle research demonstrated, before the 1964
Surgeon

17 General's report came out, that nicotine was
addictive,

18 correct?

19 A. No, I wouldn't say that work demonstrated
that, no.

20 Q. Would you agree that that work
demonstrated that

21 there were implications regarding cardiovascular
disease

22 from that research?

23 A. Certainly not from Hippo I and Hippo II,
that was

24 looking at the endocrinology effects. I don't
believe they

25 looked at cardiovascular effects in that work,
The Fate of

3339

1 Nicotine. I don't know if they discussed
cardiovascular
2 effects in there, but certainly the Hippo work
was not
3 addressing cardiovascular.
4 Q. You know that research had been sent to
Brown &
5 Williamson at the time, correct?
6 A. I'm just trying to recall if I saw a memo.
Yes, I
7 think it was sent to Brown & Williamson.
8 Q. And you know at that time Brown &
Williamson was
9 considering what, if anything, of the research
they had
10 they should send to the Surgeon General's
advisory
11 committee that was writing the 1964 report,
correct?
12 A. Again, I've seen documents which discuss
the
13 situation between as to what the Surgeon General
was
14 requesting from all the tobacco companies and
what Brown &
15 Williamson were considering about that
situation. I have
16 seen some memos and documents on that, yes.
17 Q. And you know that Brown & Williamson
consciously made
18 a decision not to share with the Surgeon General
the
19 Batelle research at that time on nicotine,
correct?
20 A. I believe the decision was not so much
Brown &
21 Williamson, they took the advice of the
consultants,
22 scientists from the UK, Armitage and Burn, that
that work
23 was not in a state or not robust enough to be
published,
24 and therefore should not be turned over to
anyone until it
25 had been further investigated, and which it was
done as

3340

1 part of TRC, and public cases were produced
subsequently.
2 Q. We are going to look at the documents in a
minute.
3 But you know that the Surgeon General advisory
committee,
4 and you know that Brown & Williamson knew, they
were not
5 looking just for published research from the
tobacco
6 industry, they were looking for any research the
tobacco
7 industry had at the time, right?

8 A. They were. But at that time also, as I've
mentioned,
9 that the work in Hippo was looking at a number
of areas
10 which were already published and already known.
And I also
11 believe that.

12 And the Surgeon General was sent by
Hockett,
13 who's a member of the tobacco research group in
the US.
14 He sent a list of all known publications in the
area that
15 was coded Hippo, and more.

16 Also at that time the tobacco
industry had
17 provided funds to Larsen, Haig and Savette, who
were three
18 medical professors in the U.S., to do a
complete review of
19 what was known about tobacco smoking and
nicotine. And
20 that would certainly form the basis of a lot of
the work
21 of the Surgeon General.

22 Q. Could we get 287, please?
23 Is this one of the memos you have
read
24 regarding that early research, February 13,
1962. This
25 was written by Sir Charles Ellis, entitled The
Effects of

3341

1 Smoking?
2 A. I've seen a number of memos on there.
Yes, I believe
3 I have seen that one.
4 Q. And in the beginning of the memo he states
that the
5 research had actually started in 1959, correct?
6 A. Yes, that's correct. Yes.
7 Q. And he lists the other research besides

Hippo I. On
8 the first page is Mad Hatter I.
9 You are familiar with that?
10 A. I'm familiar with that, yes.
11 Q. And part of Mad Hatter I that was
conducted at the
12 time was actually a literature survey, was it
not?

13 A. The first one, Mad Hatter was looking at
literature,
14 yes.

15 Q. Next page please. Mad Hatter II then
looks at some
16 of the social and physiological factors of the
smoking
17 habit?

18 A. Yes.
19 Q. That's your understanding of what
happened?
20 A. Yes.

21 Q. And Mad Hatter III resulted in a report
entitled The
22 Fate of Nicotine in the Body, correct?
23 A. Correct, yeah.
24 Q. And that, at the time, used not only
animals but
25 humans, correct?

3342

1 A. Yes, if I can remember correctly, I think.
2 Q. Well, it states that there also, does it
not?
3 A. Yes, animal work and human work, yes.
4 Q. And that was very sophisticated work, was
it not?
5 A. It was -- I wouldn't say very
sophisticated, it was
6 using a number of techniques which other people
had used.
7 Contemporary people were using at the time. It
was a very
8 exhaustive piece of work, but I wouldn't
necessarily say it
9 was sophisticated.
10 Q. It was using radioactive carbon 14
labeling of
11 nicotine to trace nicotine throughout the body?
12 A. That was used in that technique, yes.
13 Q. That type of work was not published until
1975,
14 correct?
15 Which was Armitage's paper?
16 A. Armitage in humans did that work in 1975.
I was
17 trying to recall if there was animal work prior
to that.
18 There may have been.
19 Q. Could you turn to the next page, and there
is Hippo
20 1, which was to identify and investigate certain
21 physiological effects on the body. That was the
report you
22 showed us?
23 A. That is the one we showed on the screen,
yes.
24 Q. Next page, please.
25 This is what Sir Charles Ellis wrote
at the

3343

1 time: What we need to know about all this is
what
2 constitutes the hold of smoking; that is, to
understand
3 addiction, we wish to be able to set up a
reasonable
4 picture of the integrity of the various aspects
of
5 smoking.
6 THE COURT: The interplay.
7 Q. Interplay, I'm sorry, of the various
effects of
8 smoking. Because only knowing in detail the

performance of
and 9 our own product can we appreciate the efforts
10 vulnerability of our position.
11 Do you see that?
12 A. Yes.
13 Q. You were aware at the time that was the
suggestion to
14 understand addiction, which led to Hippo 2?
15 A. I see what is written there. The problem
I have by
16 reading Sir Charles Ellis and other people
around that
17 time, is what they actually meant by the term
addiction.
18 In many cases Sir Charles would use
the word
19 habit. Why do people smoke, the smoking habit,
the
20 smoking addiction.
21 I have no proof of this, but my
impression was
22 he was using that as a very loose term, not in
the same way
23 a person would use the term addiction today.
This was in
24 the 50's and 60's.
25 And to my mind this whole work that
was done in

3344
1 Hippo, the fate of nicotine, was really trying
to
2 understand why people were smoking, and what
role did
3 nicotine have in the motivation for smoke? Why
people
4 smoked, why people continue to smoke.
5 To me that was not the same as
clinical
6 addiction and classical addiction, but I accept
he does
7 use the terms, but I think he uses the terms
habit; a
8 habit, yet addiction almost synonymously
throughout his
9 writing.
10 Q. Next page, Sir Charles Ellis.
11 Now, this memo was to the management
of BATCo
12 to fund Hippo 2, correct?
13 A. Yes, I believe it was. It was talking
about costings
14 and fundings, yes.
15 Q. Can we bring that up?
16 Dr. Ellis wrote at the time, as a
result of
17 these various researchers, we now possess the
knowledge of
18 the effects of nicotine far more extensive than
exist in
19 published scientific literature. Now, you say
you

20 disagree with that statement?
21 A. I say, in terms of my review today,
looking at things
22 like Hippo I, Hippo II, and particularly the
fate of
23 nicotine, the things I've extensively reviewed,
looking at
24 the information in those compared to what was
known at that
25 time by looking through Larsen and tracking back
through

3345

1 Larsen, I would say that not -- that is not the
case.
2 I think there was -- a lot was known
about
3 nicotine on these areas. I think Sir Charles
was being a
4 little bit exaggerative in that phrase there.
5 Q. To your knowledge, he was not involved in
any way in
6 litigation at that time, was he?
7 A. I don't think so. I don't know, but I
wouldn't have
8 thought so.
9 Q. Now, you also know, if we could go to the
next page,
10 the Batelle nicotine research was kept at a high
level of
11 secrecy within BATCo, correct?
12 A. Yes, I've read that in there. I don't
know
13 personally, I wasn't there at the time. But
yes, I've seen
14 that.
15 Q. And you know that, in fact, the documents,
the Hippo
16 1 and the Mad Hatter reports, were not even
available to
17 the scientists within BATCo at that time,
correct?
18 A. I don't know that for a fact, but I have
seen
19 statements which suggest that that may have been
the case.
20 But I don't know for certain.
21 Q. Well, the first paragraph reads: For good
reasons,
22 the results of Batelle's work have been kept at
a high
23 level of secrecy, but they are now building up
to a
24 comprehensive picture of the action of nicotine.
I suggest
25 they should soon be made available in detail to
a few of

3346

1 our top scientists.
2 Correct?
3 A. That's what he says, yes.
4 Q. If you could go to Exhibit 277 -- 279, I'm

sorry.

5 Now 279 is the final report for
Project Hippo
6 which you had looked at briefly when Miss Brody
was asking
7 her questions, correct?
8 A. That's correct, yes.
9 Q. Would you go to the next page.
10 You know from your review of Project
Hippo that
11 one of the things that Batelle research showed
was that
12 nicotine caused tolerance in the animals that
they were
13 using, correct?
14 A. That's one aspect which they looked at,
was to look
15 at what they call fresh rats, where they would
give
16 nicotine, the first injection of nicotine. And
tolerance
17 rats, these would be rats that had been exposed
to nicotine
18 over time, and their response to nicotine was
dropped as a
19 result of what they call the tolerance, yes.
20 Q. What they wrote here was that the tolerant
rats,
21 after prolonged daily treatment, their tolerance
to
22 nicotine became such they could bear, without
fatal
23 reaction, doses that would be lethal to fresh
rats,
24 correct?
25 A. That's what he says there, yes.

3347
1 Q. And they knew at that time, and part of
the research
2 in Mad Hatter III related to the connection
between
3 tolerance and addiction, correct?
4 A. That certainly was talked at the time,
whether
5 habituation, addiction and tolerance was
something which
6 was involving both of those two aspects. It was
only one
7 part of the whole addiction habituation
argument.
8 The problem that I have with the
Hippo report
9 is when they talk about flesh rats, tolerant
rats, and
10 resistant rats. If you were to go to look at
the Armitage
11 appraisal, which is the thing we showed
earlier, Armitage
12 was very, very unhappy in the way in which they
13 categorized and tested for tolerance in fresh
rats. They
14 were using a technique that was not known to

anyone.

15 There were LD 50 techniques that
were available
16 for use, and they used some strange techniques
which

17 Armitage was very unhappy about, and unsure
what they were
18 saying was scientifically correct. And that
was one of
19 his criticisms of the work.

20 MS. BROWDY: Your Honor, I have
moved to strike

21 the non-responsive portions of that.

22 THE COURT: Overruled.

23 MR. KRISTAL: Could you bring up
362, please.

24 Q. This was the result of Mad Hatter III, the
fate of
25 nicotine in the body, correct?

3348

1 A. Yes.

2 Q. If you could to go the next page, please.

3 Now, at the time, if you could bring
that up,

4 they were exploring, the researchers were

exploring what
5 was it that caused the tolerance in the rat in
an effort

6 to try to understand nicotine addiction,
correct?

7 A. They were looking at the effects of

nicotine, they
8 were looking at nicotine and the smoking smoking
habits.

9 Sir Charles Ellis, I think, at times
would use

10 the word addiction, but they were looking

really at the

11 whole pharmacokinetics of nicotine and

pharmacology of

12 nicotine, not necessarily nicotine and

addiction.

13 Q. And this is the concluding paragraph of

the report,

14 is it not? And they write: Although tolerance

to some

15 drugs may depend on accelerated enzymatic

breakdown,

16 prolonged consumption of others, including

morphine,

17 appears to induce cellular adaptations.

18 So those were the two theories they
were trying

19 to understand; why there was tolerances,

accelerated

20 breakdowns, or actual adaptation of the cells

of the body

21 to the nicotine itself. They are talking about

two known

22 tolerance mechanisms at that time.

23 Then they write, in any case, the
present

24 results offer no conclusive evidence for any
 particular
 25 mechanism involved in tolerances to nicotine;
 nor do they

 3349
 1 indicate a lead to the phenomenon of addiction.
 2 We believe that both tolerance and
 addiction
 3 are intimately connected, and it would be most
 useful to
 4 investigate the tow phenomenon with regard to
 cellular
 5 adaptation, especially in target organs of the
 central
 6 nervous system.
 7 So the conclusion of the Mad Hatter
 research is
 8 that we can't tell which of the tolerance
 mechanisms were
 9 involved in the addiction, and they were
 recommending
 10 further research?
 11 A. What they were saying was that nicotine
 did not
 12 exhibit classical tolerance in terms of the
 enzymatic
 13 breakdown, or in terms of cellular adaptations.
 Their
 14 works showed that didn't happen. So they were
 then, as it
 15 says later on, they were looking at further work
 on how
 16 nicotine was working, yes.
 17 Q. Would you bring up 262, please.
 18 Now, this is a memo that Sir Charles
 Ellis
 19 wrote at the time, November of 1961, when he
 met with a
 20 Mr. Hasselback, who was the lead researcher in
 this
 21 nicotine research, correct?
 22 A. If I remember correctly, he was one the of
 the people
 23 at Batelle, yes.
 24 Q. And the first paragraph states that they
 had met,
 25 they reviewed the progress of the research, and
 they were

 3350
 1 going to segue into the research on the Aerial
 nicotine
 2 delivery device, correct? That would have been
 the next
 3 step in the research?
 4 A. That's true. They were looking at what
 they thought
 5 were the benefits of nicotine, trying to
 understand that,
 6 with a view to producing something which, as you
 mentioned
 7 an Aerial prototype which was which would be the

a device
8 which would give nicotine but would not give the
smoke
9 component -- or sorry, components of smoke and
combustion.
10 So it would be like the Premier product,
something similar
11 to that.
12 Q. And in this memo there is a suggestion
after meeting
13 with the head of the research that further
research be done
14 to understand the phenomenon of nicotine
addiction,
15 correct?
16 A. I can't recall precisely without seeing
the document
17 that they said that but I know there was further
research
18 done to look at nicotine release, nicotine
pharmacology,
19 nicotine transfer in terms of the Aerial type,
the
20 prototype device.
21 Q. Dr. Ellis wrote at the time: The
experiments of
22 Hippo have led to a great increase in our
knowledge of the
23 effects of nicotine, anti-diuretic and/or
requisite release
24 of the fat mobilizing hormonal effects on the
effects of
25 gonadotrophic hormones.

3351

1 Do you see that?
2 A. Yes.
3 Q. And he drops down these where he's talking
about
4 addiction, smoking demonstrably is a habit based
on a
5 combination of psychological and physiological
pleasure and
6 it also has strong indications of being an
addiction. It
7 gives in important features from addiction to
other
8 alkaloid drugs but yet there are sufficient
similarities to
9 justify stating that smokers are nicotine
addicts.
10 And then he concludes with his
suggestion for
11 further research, does he not? These are the
reasons for
12 proposing that Project Hippo be continued with
the
13 particular object of finding the causes of the
pleasurable
14 physiological effects and the causes of
addiction.
15 Correct?
16 A. He's, yes, he's mentioning again there

he's looking
17 to the benefits of nicotine and physiological
effects of
18 nicotine.
19 I go back to my original arguments
he used the
20 word term "habit" and "addiction" perhaps in a
way today
21 we have a completely different view as to
addiction as
22 what was meant in the 50's and 60's.
23 Q. Now you know at the time that one of the
people who
24 reviewed the Batelle research was one of the
lawyers for
25 Brown & Williamson, correct?

3352
1 Addison Yaman?
2 A. I've seen reference to memos to Addison
Yaman. I'm
3 not sure if he was reviewing the work as a
scientific
4 reviewer. I have seen documents to him, yes.
5 Q. And Addison Yaman was one of the gentleman
that Brown
6 & Williamson in the United States that was
involved in
7 making the decision not to send the research to
the Surgeon
8 General, correct?
9 A. Again, I'm juts just trying to refresh my
memory on
10 the track of the memos, but it's possible, yes.
That
11 may be correct. I can't recall precisely but I
have no
12 reason to disbelieve you on that.
13 Q. Let me fist first bring up 369, please.
14 Thank you.
15 Would you highlight that? Bring it
up.
16 Is this a memo written by Addison
Yaman, which
17 is titled Strictly Private and Confidential,
written July
18 of 1963. And it's entitled Implications of
Batelle, Hippo
19 I and II, and Griffith Filter.
20 Do you see that?
21 A. Yes, I do see that.
22 Q. You have seen this document before?
23 A. First time I saw it was yesterday when you
sent me to
24 look at it on cross examination.
25 Q. So the very first time you saw this
document --

3353
1 THE COURT: I think that's what he
just said.
2 MR. KRISTAL: Thank you, your Honor.
3 Q. If you could go to the first highlighted

page.

4 Could you go back to the first page?
5 I know it's hard to see at the top
there he's
6 quoting from the Hippo report, correct? Where
it says
7 Batelle says, and there is a lengthy quote?
8 A. Yes, I see Batelle says. It's pretty
difficult to
9 read from there on.
10 Q. Could you bring you the highlighted
section up? And
11 this is what Mr. Yaman said after reviewing the
Hippo
12 research.
13 Moreover, nicotine is addictive. We
were then
14 in the business of selling nicotine, an
addictive drug
15 effective in the release of stress mechanisms.
16 Do you see that?
17 A. I do see that, yes.
18 Q. And that was discussed with the other
executives at
19 Brown & Williamson, was it not, before the
decision was
20 made to send this research to the Surgeon
General in 1964?
21 A. There were a number of discussions.
Again, my
22 following and tracking memos which were around
at the time,
23 I wouldn't like to say that is a reason why it
wasn't sent
24 to the Surgeon General but the key reason to me
was the
25 critique and on the original work which was
found to be of

3354

1 poor quality. And I still think that is the
reason it was
2 not sent to the Surgeon General at that time.
3 THE COURT: How much more do you
have.
4 MR. KRISTAL: About 10 minutes.
5 THE COURT: I'm going to take a five
minute
6 break. We are going to go for about -- try to
get this
7 computer back up. You are welcome to wait
there or go
8 back to the jury room. This will take less
than five
9 minutes.
10 (Brief recess.)
11 THE COURT: Okay, if you will retake
your
12 seats.
13 If you will continue your cross
examination.
14 MR. KRISTAL: Thank you, your Honor.
15 Q. 346, please.

16 This is a letter dated May 6, 1963.
So this is
17 about two months before the cable that you
showed
18 demonstrating the decision not to send the
information to
19 the Surgeon General, right?
20 A. Yes, that would be right. I can't recall,
but yes.
21 Q. This is from a gentlemen named Jack
Johnson to DeBaun
22 Bryant, Esquire at Brown & Williamson. And it
reads: Dr.
23 DeBaun, pursuant to my telephone conversation
with you and
24 Jim Ravlin on Friday, and my conversation with
you today,
25 please find enclosed the substance of a proposed
letter to

3355
1 the Surgeon General's Advisory Committee on
Smoking and
2 Health. Do you see that?
3 A. Yes, I do.
4 Q. This is part of the --
5 THE COURT: Wait.
6 MS. BROWDY: Your Honor, I
understand you have
7 already ruled on this set of documents, but I
want to
8 maintain our objection.
9 THE COURT: I'll note your objection
and
10 overrule it.
11 BY MR. KRISTAL:
12 Q. That is part of what you reviewed last
evening?
13 A. That was one of the documents you sent me
last
14 evening, yes.
15 Q. Dropping down to the next highlighted
section,
16 please. I am of the further opinion that any
description
17 in the letter to the committee of the methods
and steps
18 involved in the various scientific research
programs
19 conducted by Brown & Williamson must necessarily
be so
20 vague and incomplete as to be irksome to the
reader.
21 Do you see that?
22 A. Yes, I do see that.
23 Q. Is that your understanding of how Brown &
Williamson
24 was going to handle the submission of the
research
25 materials to the Surgeon General?

3356
1 A. I would hope that wasn't the way he was

doing it, but

2 I have no knowledge of the way he was doing it
at the time.

3 It was before my time.

4 Q. And the final paragraph of the letter from
a

5 litigation standpoint, I believe it axiomatic
that it is

6 best to submit the least scientific material
possible

7 consistent with the objective of not irritating
the

8 committee. Do you see that?

9 A. I see that.

10 Q. Was that the purpose of Brown &
Williamson's

11 submissions to the Surgeon General to submit the
least

12 amount of scientific materials as possible?

13 A. I would hope not, no.

14 Q. As I mentioned on the telephone, I would
prefer to

15 see only previously published material
submitted. If you

16 find you have enough such material to warrant
submitting

17 it, I await the outcome of your search in that
regard.

18 Now that demonstrates, does it not,
that Brown

19 & Williamson was aware that it was not just
published

20 material the Surgeon General's Advisory
Committee wanted,

21 but also unpublished research that they had in
their

22 possession, correct?

23 Doesn't that demonstrate that to
you?

24 A. It demonstrates to me, I think the Surgeon
General

25 was looking for any information which was quite
novel,

3357

1 provided novel insight into the work of the
health issue

2 and other aspects of that. My belief was he was
looking at

3 what was happening at the time I wasn't there.
At the time

4 was sort of looking at documents was that many
of the

5 health related works that was going on was not
actually

6 being done by Brown & Williamson, it was done by
various

7 funded medical researchers. And my information,
my

8 impression was that that was actually handed
over to the

9 Surgeon General, which was helpful in his 1964
report.

10 Q. Now, you know that on July 3rd, 1963, the
date of
11 that telegram that you discussed on direct
examination, you
12 know that in fact there were two telegrams that
actually
13 crossed each other. You showed us the one from
England to
14 the United States. Have you seen the one going
from the
15 United States to England on that same day
regarding

16 submission to the Surgeon General?
17 A. It's quite possible I have. I can't
recall the dates
18 in my mind at the moment, but if you have that,
you could

19 show me.
20 Q. Could you bring up 363, please?
21 Now, this is the cable from Mr.
Yaman, Addison
22 Yaman to Mr. McCormick.
23 Now, we have already identified Mr.
Yaman as
24 the lawyer for Brown & Williamson, correct?
25 A. Yes, correct.

3358
1 Q. Down in the lower left hand corner where
it says BC,
2 that's blind copied, to Mr. Finch, Wade and
Griffith. Now
3 they were top executives at Brown and
Williamson.
4 A. I'm not sure about Mr. Finch but Wade and
Griffith at
5 that time I recall.
6 Q. And Mr. McCormick was the plaintiff's of
British
7 American Tobacco at that time, was he not?
8 A. I believe so. I can't recall precisely.
9 Q. This is what Mr. Yaman writes in his
telegram.

10 Prior to your receipt of your telex
July 3rd,
11 apparently what happened in this telegram
happened before
12 the telegram happened in the United States,
saying this
13 work is really not so good. It says prior to
receipt of
14 your telex?

15 A. If that's the one, I can't recall whether
the July
16 3rd was the one that was sent about TRC
consultant
17 scientists.
18 Q. Hoyt of TIRC, you know that Mr. Hoyt was
President of
19 the Tobacco Research Council in the United
States at that
20 time?
21 A. I do not know that, I know by looking at

memos.

22 Q. He agreed to withhold disclosure of the
Batelle
23 report to the TIRC members or SAB until further
notice from
24 me. So the first thing we know from this memo,
or this
25 cable, is that Mr. Hoyt at the TIRC had agreed
not to even

3359

1 give the Batelle research to the Scientific
Advisory Board

2 of the TIRC, right, SAB?

3 A. I presume that's what SAB means,
Scientific Advisory

4 Board.

5 Q. And the telegram continues: Finch agrees
submission

6 of the Batelle or Griffith developments to
Surgeon General,

7 undesires and we agree, continuance of Batelle
work useful,

8 but disturbed at its implications, re:

Cardiovascular

9 disorders.

10 Do you see that?

11 A. I do see that.

12 Q. So there was a concern of implications in
the Batelle

13 work regarding cardiovascular disorders at that
time, was

14 there not?

15 A. I think looking, at the work that was
going around

16 there, the Batelle work was actually looking at
the

17 cardiovascular effects. Certainly Hippo I,
Hippo II were

18 not looking at that, but there was works going
on, not with

19 BATCo or with Brown & Williamson, but external
workers who

20 were talking about the potential role of

21 nicotine and
22 cardiovascular system. My impression, it is
very difficult

23 for me to know exactly what was happening at the
time

24 without reading various memos what Sir Charles
was trying

25 to do.

It looks to me he was not trying to
promote the

3360

1 benefits of nicotine and coming forward and
saying there

2 may be a vascular problem. If this was
published, there

3 may be problems.

4 But that's my impression. It's very
difficult

5 for me to say exactly what was happening.
6 Q. And then Mr. Yaman continues: We believe
combination
7 Batelle work and Griffith's developments have
implications
8 that increase desirability, reevaluation, TIRC,
and
9 reassessments fundamental policy re: Health.
Hope to get
10 off comprehensive note next week.
11 Do you see that?
12 A. I see that, yeah?
13 Q. Would you bring up 367, please?
14 THE COURT: Let me ask counsel to
approach.
15 (The following discussion was
conducted at the
16 side bar between court and counsel, out of the
hearing of
17 the jurors, as follows:)
18 THE COURT: I just wonder, I want
the pace of
19 this to pick up by about a quantity of four.
When you are
20 going through this, get through it. It's
taking so long.
21 (The following proceedings were
conducted in
22 open court.)
23 MR. KRISTAL: Let me go to 449.
24 Q. This is the last document I have. Now,
this is dated
25 October 14th, 1964, on the bottom, that's some
ten months

3361
1 after the Surgeon General's report had come out,
is that
2 correct?
3 A. I'll take your word for that, I can't
recall
4 precisely the dates, but yes.
5 Q. And this is a file note re: Reports on
Project Hippo
6 I and II, Sir Charles Ellis, say the ban of
secrecy on the
7 above reports has now been lifted. Anyone of
reasonable
8 standing in the Research Department may now be
permitted to
9 read them. He will tell the Research Department
that the
10 reports are in the Law Department files.
11 Was it usual business at BATCo to
have research
12 files put into the Law Department?
13 A. I'm not aware of that was a normal
practice, it
14 certainly isn't today. I'm not aware of it at
that time.
15 MR. KRISTAL: That's all I have.
Thank you.
16 THE COURT: Do you have any

redirect?

17 MS. BROWDY: Just a few questions,
your Honor.

18 REDIRECT EXAMINATION

19 BY MS. BROWDY:

20 Q. Dr. Dixon, you were asked a number of
questions about
21 documents in the early 1960's, and I want to try
to unpack

22 that sequence of time a little bit.

23 A. Yes.

24 Q. I would like to start with the Armitage
appraisal
25 that you refer to, okay.

3362

1 You testified on direct that
research was done

2 at the Batelle Institute, and that research was
reviewed
3 by Dr. Armitage and Dr. Burn in the 1960's,
correct?

4 A. That's correct. Yes.

5 Q. And Dr. Armitage and Dr. Burn concluded
that their
6 research was not of publishable quality,
correct?

7 A. That's correct. They thought it was
incomplete and

8 there were a number of problems identified in
the report,

9 and they thought it wasn't worthy of publication
at that
10 time.

11 Q. And their conclusion was reached on June
21, 1963,

12 correct?

13 A. That's the date on that, correct, yes.

14 Q. And, in fact, this is -- is this the
British way of

15 indicating dates?

16 A. Yeah, we do it the other way around from
America,

17 it's easier, 21 and 6.

18 Q. So 21 is the 21st day of June, 1963?

19 A. Yes.

20 Q. So you didn't have the peer review of the
Hippo

21 research until 1963, fair enough?

22 A. That's correct, yes.

23 Q. Now, let's look back at some of the
documents that

24 plaintiff's counsel showed you.

25 Do you remember he spent some time
on this 1961

3363

1 piece where Ellis is describing a meeting in
London with

2 Mr. Hasselback, correct?

3 A. Mr. Hasselback, being one of the Batelle
researchers,

4 yes.

5 Q. And this discussion refers to the
properties of
6 Project Hippo?
7 A. Yes, yeah.
8 Q. But that was before it was peer reviewed?
9 A. That was, yes, two years before it was
peer reviewed.
10 Q. And similarly, he showed you Plaintiff's
Exhibit 287,
11 the effects of smoking proposals for further
research
12 contracts with Batelle, and that's dated
February 13th,
13 1962, correct?
14 A. Yes.
15 Q. And that, again, is before the Hippo
research was
16 peer reviewed, correct?
17 A. That's correct, yeah.
18 Q. And in 1962, Sir Charles suggested that
they had more
19 information on nicotine than others did,
correct?
20 A. That's, I think that was from that '62
memo correct,
21 yeah.
22 Q. But at the time you wrote that, the
appraisal of the
23 Hippo reports wasn't available?
24 A. The timing was a little later than that,
yes.
25 Q. Based on your review of the research that
was done,

3364

1 the Hippo work and the appraisal, was Sir
Charles correct
2 in 1962?
3 A. No, I think Sir Charles was incorrect
there, that
4 there was -- as I said before, there was a lot
of
5 information on these top which is in the public
domain, in
6 the public literature, so I think he was wrong
on that.
7 Q. For example, one of the places you
referred to these
8 ideas was published was the Larsen, Haig and
Savette text?
9 A. I mentioned that, which is an excellent
text, if you
10 like 1961 when that was published, if anyone was
wanting to
11 look at what the effects of nicotine and tobacco
were on
12 fist physiological pharmacology, that was a
superb text to
13 go from.
14 Q. Do you know whether the tobacco industry
helped to
15 sponsor the that text?
16 A. They provided funding to the people at the

University
17 of Virginia to produce that text and review all
the work.
18 Q. Let's move forward from the time that
telexes were
19 exchanged about the submissions from Batelle to
the Surgeon
20 General's Committee.
21 This is Plaintiff's Exhibit 365 and
that's
22 dated July 3rd, 1963. Do you see that?
23 A. Yes.
24 Q. Is that before or after the Armitage
appraisal?
25 A. I think it was -- June was the Armitage,
so that

3365
1 would be after.
2 Q. After the Armitage appraisal was
completed, this
3 cable indicates TRC consultant scientist advice,
it is too
4 early to submit Batelle reports to Surgeon
General's
5 advisory committee, but we think they will agree
that
6 continuation by Batelle of this work would be
useful.
7 Charles Ellis is convinced of the
beneficial
8 effects of nicotine but agrees further
investigation
9 desirable before publication.
10 A. Yes.
11 Q. The TRC consultant scientists referred to,
is that
12 Dr. Armitage and Dr. Burn?
13 A. Yes.
14 Q. And were those premier scientists in the
field that
15 were being studied by Hippo and the like?
16 A. They certainly were. Professor Burns was
head of
17 pharmacology in the UK at the Oxford University;
and
18 Professor Armitage was also a member of that
university.
19 They were very good scientists at the time.
20 Q. They were scientists. Were they lawyers?
21 A. No.
22 Q. Sir Charles Ellis was a scientist or
lawyer?
23 A. Sir Charles Ellis was a scientist a
physicist.
24 Q. Based on this cable, or any of the cables
that the
25 plaintiffs counsel showed you, is it your view
that the

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1 decision to turn over the decision of whether
the materials

2 in Hippo were of publishable quality were being
turned over
3 to the Surgeon General, was that driven by
scientists or
4 lawyers?

5 MR. KRISTAL: Objection, your Honor.

6 THE COURT: Sustained.

7 BY MS. BROWDY:

8 Q. Have you reached any conclusions, based on
your
9 review of the documents, whether scientists or
lawyers?

10 THE COURT: He doesn't have personal
knowledge

11 of that. I mean, we have let the jury make a
12 determination on that issue, that was the
grounds that it

13 was sustained on.

14 MS. BROWDY: Thank you, your Honor.

15 Q. Are you aware, from your review of the
documents,
16 whether in fact publishable quality research on
the

17 benefits of nicotine was turned over to the
Surgeon
18 General?

19 A. Yes, through my view of documents around
that time,
20 there was a document produced by Hockett which
was sent to
21 the Surgeon General, which he covered what Sir
Charles
22 would say would be the benefits of nicotine, the
stress
23 effects, et cetera, plus much more, many more
aspects of
24 nicotine pharmacology.

25 Q. Showing you a document that has been
marked as

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1 Defense Exhibit GK 219, a March 17th, 1963
letter from
2 Robert C. Hockett to Peter Hammel of the Surgeon
General's
3 Advisory Committee on Smoking and Health. Is
that the
4 document to which you were referring?

5 A. Yes, it is. There is an attachment with
all the list
6 of references on that, if it's the one I'm
thinking of.

7 Q. Let's, unpack this a little bit. Mr.
Hockett wrote,
8 some time ago when you and Mr. Roose were in New
York, you
9 indicated that you would like to have some
material on the
10 possible beneficial effects of nicotine.

11 Do you see that?

12 A. Yes.

13 Q. And was that your testimony that Hippo and
the like

14 were looking at the beneficial effects of
nicotine?
15 A. That was a major aspect of Hippo, yes.
16 Q. And then, in fact, is this letter as you
indicated?
17 THE COURT: Isn't this pretty far
beyond the
18 scope of the cross? It seems we are going down
a
19 different route now. You are only allowed to
respond to
20 something he brings up for the first time.
21 MS. BROWDY: Your Honor, I'll be
brief then.
22 Q. This is the Hockett letter that you were
referring
23 to?
24 A. Yes.
25 Q. And this letter shows that research
comparable to

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1 Hippo of publishable quality was submitted to
the Surgeon
2 General's Advisory Committee?
3 A. It was a research that had been published,
and a list
4 of references were going to be sent to the
Surgeon General,
5 yes.
6 MS. BROWDY: I have nothing further.
7 Thank you.
8 THE COURT: Thank you. You can step
down.
9 I'll afford counsel for the
defendant, if they
10 want to make any interim argument, I'll afford
them that
11 opportunity.
12 This is not evidence but an
opportunity to
13 comment on what evidence the parties think has
been
14 offered.
15 MS. BROWDY: You have just heard
from Mike
16 Dixon, a research scientist at British American
Tobacco,
17 who studies smoking behavior.
18 And what did Dr. Dixon tell you?
People have
19 been studying nicotine and researching nicotine
for
20 decades, both inside and outside the company.
21 He started with some very early
research, the
22 Hippo research on the beneficial effects of
nicotine. He
23 showed you that nicotine was done, it was
reviewed by
24 eminent scientists Alan Armitage and Dr. Burn.
They found
25 the work was not novel, it was not publishable

quality,

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1 and further research had to be done.
2 Plaintiffs counsel tried to suggest
that the
3 decisions about Project Hippo, and whether to
turn that
4 over, were decisions made by lawyers. But I
think the
5 telex and Dr. Dixon's testimony clearly shows
that that
6 decision was science driven. It was driven by
the writing
7 of Armitage and Burn, and the decision of
scientists like
8 Sir Charles Ellis.
9 What else did Dr. Dixon speak to you
about?
10 He pointed out that compensation has
been
11 studied by the scientific community for
decades. That
12 compensation is short term and incomplete.
That it's for
13 sensory effects rather than for nicotine. That
vent
14 blocking by lips or fingers is incomplete and
doesn't
15 affect the liberties to the smoker.
16 And if the companies had tried to
raise pH, as
17 the plaintiffs have claimed in this case, the
result would
18 be no more nicotine to the brain. The nicotine
would go
19 more slowly to the brain. In fact, the real
difference
20 would be sensory or taste effects.
21 You have heard comments that some of
these
22 summaries of the importance of you analyzing
the demeanor
23 of the witness on direct versus his demeanor on
cross, and
24 I suggest you take a one step slightly further
with this
25 witness; that his testimony on compensation is
testimony

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1 on pH, his testimony on vent blocking. That
they couldn't
2 even cross examine him, they couldn't even ask
a single
3 question to counter the opinions he gave you in
the case
4 on those topics.
5 THE COURT: Mr. Kristal.
6 MR. KRISTAL: Thank you, your Honor.
7 The reason I didn't do that was that
was a
8 smoke screen for what had come regarding the

Batelle
9 research. In 1954, Brown & Williamson pledged
to
10 cooperate with the public health authorities.
They
11 pledged that the safety of the consumer was
their
12 paramount concern. And they had an opportunity
ten years
13 later in 1964 to make good on that pledge,
didn't they?
14 Everyone at the time who read the
Batelle
15 research concluded that nicotine was an
addictive drug,
16 including the lawyer himself. We are in the
business of
17 selling nicotine and an addictive drug, that
was his
18 conclusion at the time after reading the
research.
19 They knew, Brown & Williamson knew
it was not
20 just published material that had to be
submitted. So the
21 fact that it was not a publishable quality,
even if that's
22 true, was not an excuse.
23 What had the lawyer, Mr. Johnston,
said? What
24 did he say? From a litigation standpoint it is
best to
25 submit the least scientific material possible.

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1 On redirect you were shown what they
did
2 submit, published literature on the benefits of
nicotine,
3 that's it. Nothing about addiction.
4 We know the consumption of
cigarettes dropped
5 after the 1964 report. Imagine how much more
it would
6 have dropped if the Surgeon General had the
internal
7 research that was kept in the Law Department,
and imagine
8 the effect it would have had on the trust funds
in this
9 case.
10 Thank you.
11 THE COURT: Thank you.
12 Would the defendant call your next
witness.
13 MR. BERNICK: We call Dr. Cloninger.
14 THE COURT: We are going to need to
recess in
15 the next five or ten minutes. Do you want to
start this?
16 MR. BERNICK: I'm more than happy.
17 THE COURT: Why don't you start and
we'll just

18 have a brief introduction of the witness.
19 C. ROBERT CLONINGER
20 called as a witness by and on behalf of the
Defendant,
21 being first duly sworn, was examined and
testified as
22 follows:
23 THE COURT: Please state your name
and spell
24 your last name.
25 THE WITNESS: C. Robert Cloninger.

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1 C-L-O-N-I-N-G-E-R.
2 THE COURT: Mr. Bernick.
3 - - -
4 DIRECT EXAMINATION
5 BY MR. BERNICK:
6 Q. Good afternoon, Dr. Cloninger?
7 A. Good afternoon.
8 Q. I guess we are not going to have a chance
to get into
9 the substance of your testimony. But to give
the jury a
10 preview, what is your area of expertise and, in
general.
11 What kinds of things are you going to be talking
about with
12 the jury when we commence tomorrow morning?
13 A. I'm a medical doctor, I'm a psychiatrist,
I'm a
14 professor of psychiatry, of genetics and
psychology at
15 Washington University in St. Louis.
active
16 Q. Could you tell us whether you have had an
active
17 clinical practice in psychiatry over the years?
18 A. Yes, I have. I've always maintained an
active
19 clinical practice since I began in 1973.
psychiatric
20 Q. Could you tell us whether you have been a
organizations over
21 consultant to various associations and
22 the years?
23 A. Yes, I've been a consultant and advisor to
the
24 National Institute of Health, to the World
Health
25 Organization, a variety of agencies such as
specialty

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1 groups and substance abuse, alcoholism.
2 Q. Are you an elected member for the
Institute of
3 Medicine for the National Academy of Sciences?
4 A. Yes, I was elected in 1989.
5 Q. Would you tell the jury, just give them a
flavor for
6 what the National Academy of Sciences is?
7 A. This is an honorary organization that
serves and

8 advises on the status of medical issues of
interest to the
9 country as a whole. It's considered basically
the most
10 distinguished medical society organization in
this country.
11 Q. The jury has heard about the DSM manual,
and
12 diagnostic rubric. Are you familiar with the
DSM manual?
13 A. All too well.
14 THE COURT: Why don't we, it sounds
like you
15 are going a bit into a different area. We are
going to
16 recess for the night. We'll start tomorrow
morning at, be
17 here at ten 'til 8:00 again. We'll have a
little longer
18 day tomorrow.
19 Same admonitions apply. Don't talk
about the
20 case among yourselves. Don't talk about the
case with
21 anyone else. Don't form any opinions or
express any.
22 So we'll stand in adjournment.
23 Finally, again, leave the pads on
your seats
24 and we'll collect them and redistribute them to
you
25 tomorrow.

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1 (The trial was adjourned at 4:45
p.m. on
2 Monday, March 8, 1999 until 8:00 a.m. on
Tuesday, March 9,
3 1999, at which time the following proceedings
were
4 conducted in open court.)
5 - - -
6 C E R T I F I C A T E
7 I, Richard G. DelMonico, Official
Court Reporter
8 in and for the United States District Court,
for the
9 Northern District of Ohio, Eastern Division,
do hereby
10 certify that the foregoing is a true and
correct transcript
11 of the proceedings herein.
12
13

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